Unit 18 and Unit 9 - Digital Animation and IT Project Management

Project Management in action and Design and develop a digital animation and effects product

Contents

1. Introduction

I have recently started working as a junior animator at a small digital media studio and have been tasked with developing an animation for a client. The client is a charity that encourages children to cycle, and they require an animation that promotes helmet safety for children aged **7 to 9 years old**.

The animation will be featured on the charity's website, must be colourful and engaging, and include music and sound effects. While it should highlight the dangers of not wearing a helmet, the tone should remain positive and not overly frightening.

The animation should be **1.5 to 2 minutes** long and completed within a budget of **£25,000**. To meet the client's needs, I will research animation techniques, assess risks, plan resources and apply appropriate tools and methodologies to manage the project effectively.

2. Research and Initial Planning

2.1 - Comparison of Two Possible Solutions

Stop Motion vs. Frame-Frame (or other options)

Stop motion involves simulating the continuous movement of static objects by filming a sequence of fixed images in succession. The frame-by-frame method changes the contents of each stage in every shot when using frame-by-frame. Stop motion and frame-by-frame techniques are employed in digital animation by photographing and then physically manipulating the objects within the frame.

Alternative animation methods that utilise stop motion and frame-by-frame include Motion Capture, Tweening (in between), and Rotoscoping.
Motion capture is a technique that records the movements of real-life actors and objects, which is then used to animate digital characters or environments, commonly employed in 3D animation for more lifelike motion.
Tweening (in-betweens) focuses on generating the intermediate frames between two keyframes, typically achieved using 2D animation software. Rotoscoping involves tracing over live-action footage to create realistic animation.

Explanation of each method

Stop motion is the technique where physical objects such as clay figures, puppets or paper cutouts are moved in small increments between the individually captured frames. When played in the sequence, these frames create the illusion of movement, and the popular variations of stop motion include claymation (e.g., Wallace and Gromit), puppet animation and object animation.

Frame by Frame: How individual drawings or digital frames are created and sequenced.

Other Methods: Briefly explain other animation techniques (e.g., computer-generated animation).

Pros and cons

	Pros ✅	Cons ❌
Stop Motion	Unique Aesthetic: It offers a distinctive, tangible texture and physical depth. Realism: Using physical models can create a more lifelike, three-dimensional feel. Artistic Charm: The handcrafted nature often adds a quirky, memorable quality to the final product.	Time-Consuming: Requires meticulous adjustments and numerous individual shots. Resource Intensive: Needs physical models, sets, and controlled lighting conditions. Limited Flexibility: Changes can be challenging once filming has started.
Frame by Frame	Full Creative Control: Each frame is crafted individually, allowing for detailed expression. Smooth Movement: Ideal for achieving fluid, dynamic sequences. Digital Integration: Well-suited for digital tools, enabling easy revisions and layering effects.	Labor-Intensive: Creating every frame by hand can be extremely time-consuming. High Frame Rate Demands: To ensure fluidity, many drawings may be required. Consistency Challenges: Maintaining a uniform style across all frames requires high precision.
Motion Capture	Realistic Movements: Captures lifelike human or object motions directly from live performance. Efficiency: It speeds up the animation process by recording natural movements. High Fidelity: Especially useful for complex, dynamic scenes in 3D animation.	Equipment and Expertise: Requires specialised hardware and technical know-how. Expensive: The setup costs for motion capture can be significant. Post-Processing Needs: Data often needs cleanup or tweaking to match the desired character style.
Tweening (In-Betweens)	Efficiency: Automatically generates intermediate frames, significantly reducing manual work. Smooth Transitions: Helps create fluid motion between keyframes. Ideal for Digital Workflows: Easily integrated with 2D animation software for faster production.	Less Organic Feel: It may lack the hand-drawn, artisanal quality of traditional methods. Limited Creative Detail: Automated frames might need additional tweaking for a natural look. Dependence on Software: The quality and flexibility depend heavily on the chosen animation software.

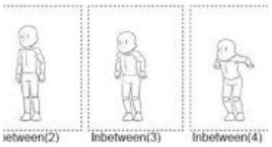
Rotoscoping	High Realism: Tracing over live-action footage produces very natural movements. Effective for Complex Motion: Helps capture nuanced motion details that are hard to animate freehand. Solid Reference: Provides a strong visual foundation for further stylisation.	Extremely Time-Consuming: Manually tracing every frame is labour-intensive. Risk of Over-Realism: it may result in animation that lacks a stylised or artistic flair. Skill Intensive: Requires precision and a high level of attention to detail.
Computer - Generated Animation	Scalability: It easily handles complex scenes and can generate numerous frames efficiently. Flexibility: Modifications can be made quickly, and 3D environments can be rotated or altered on the fly. High Detail: Capable of producing intricate, photorealistic visuals.	Steep Learning Curve: Demands specialised software and skills. High Costs: Software licenses, hardware requirements, and rendering time can add up. Potential Lack of “Handcrafted” Charm: It may feel less unique if not combined with artistic elements.

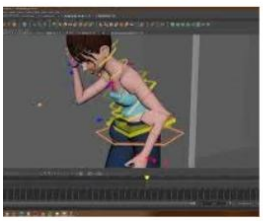
Screenshots of research findings

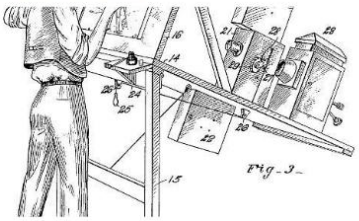
These images illustrate the different animation techniques, including stop motion, tweening, motion capture, rotoscoping, computer-generated animation, and frame-by-frame animation.

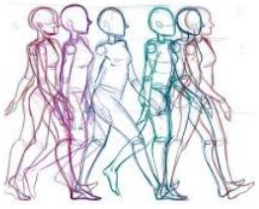
These images illustrate different animation techniques used in creating animations:"

At the top left is the Stop Motion, which looks at a stop-motion setup behind the scenes, where clay models are adjusted and photographed frame by frame.









The tweening (in-betweens) diagram at the top right shows how in-between frames are generated between key poses in animation.

In the middle left is the Computer-Generated Animation of a 3D animation software showing a rigged character in the process of being animated.

In the middle right, Rotoscoping is a historical diagram of the rotoscoping technique, where animators trace over live-action footage to create realistic motion.

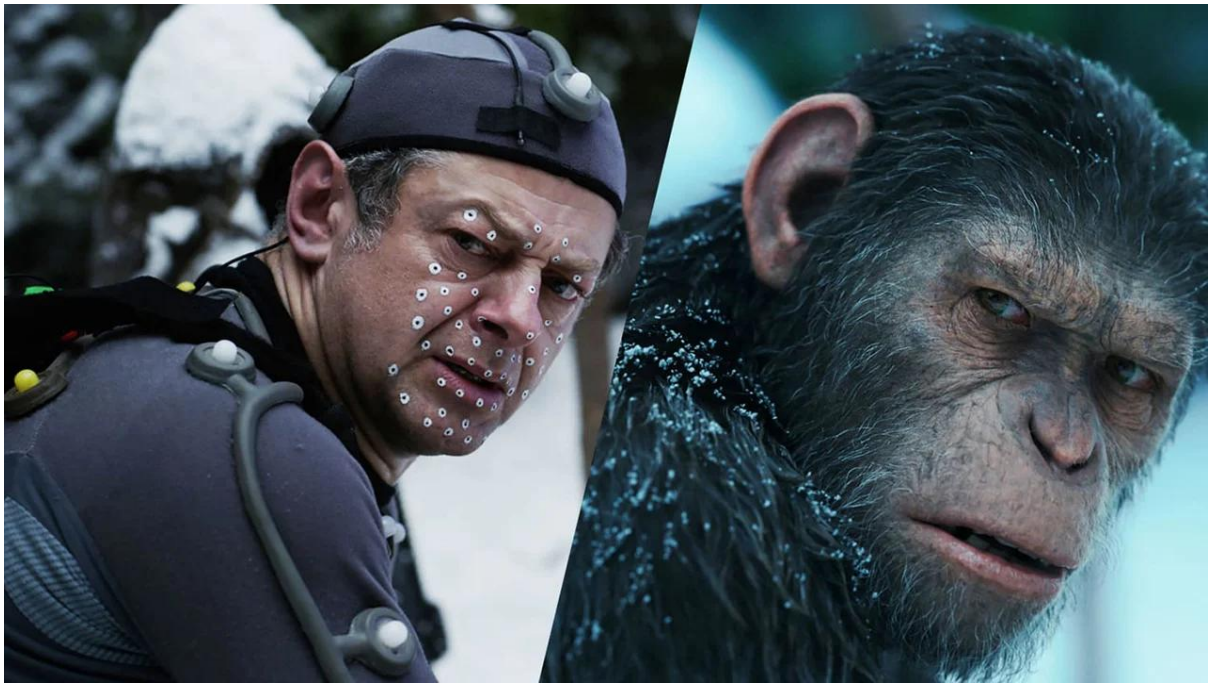
The bottom left is Motion Capture, where an actor in a motion capture suit records real movements to apply to the digital characters when making an animation.

The bottom right frame-by-frame Animation is the series of hand-drawn walking poses that illustrate how the animators create movement frame by frame.

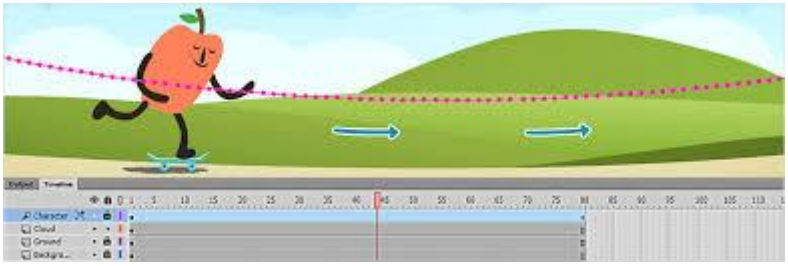
Examples from well-known animations using each technique
Stop Motion:
Movies like Wallace and Gromit, Coraline, and The Nightmare Before Christmas use stop motion, where the physical models are moved slightly between each frame to create smooth animation.

Frame-by-Frame Animation
Classic Disney films such as The Lion King were made using frame-by-frame animation, where every frame is drawn individually to create the movement.

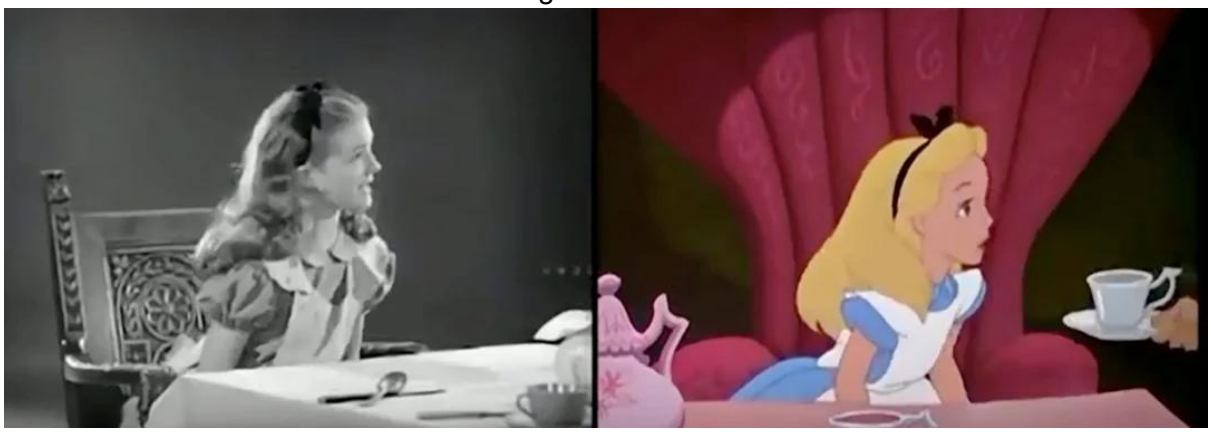
Motion Capture
Films like Avatar and Planet of the Apes, as well as games like Uncharted, use motion capture, where the real actors' movements are recorded and applied to the animated characters for realistic motion.



Tweening (In Between)
Flash animations, such as Homestar Runner, use tweening to automatically fill in the frames between key poses, which makes the animation quicker and smoother.



Rotoscoping
Movies like A Scanner Darkly and early Disney films like Snow White use rotoscoping, where the animators trace over real footage to create life-like movements.



Computer-Generated Animation
Animated films like Toy Story and Finding Nemo use CGI to create detailed 3D characters and environments, which allows for more flexibility and realism in animation.

2.2 - Risk Assessment for Both Solutions

The risk assessment is essential when working with animation to identify potential threats that could disrupt the workflow, cause data loss, or lead to security breaches. Assessing both external and internal risks requires the control measures that can be put into place to minimise the impact and ensure smooth production.

The table below outlines the key risks and the management strategies for the animation workflow.

Risk Type	Description of the Risk	Impact	Risk Control Measures
External for the power failure or system crash	The unexpected shutdowns led to the loss of unsaved work.	High	To enable autosave, use a UPS and save the work regularly.
External cybersecurity threats	The malware, hacking or data breaches and the compromising of animation files.	High	To use antivirus software, a firewall and secure backups.
External for software licensing issues	The expired licenses could stop the animation work.	High	Set up automated reminders for the license that would renew well in advance and maintain a central record of all the software that the supplier offers with flexible renewal options.
Internal for the hardware or software malfunction	The equipment failure disrupted the animation workflow.	Medium	Regular maintenance, updates and backup devices.
Internal for human error	The file loss, incorrect settings or saving in the wrong format.	Medium	The training user uses the version control and creates multiple backups.
Internal for time management issues	Poor timing for management can lead to missed deadlines.	Medium	The use of project management tools like Monday.com or Trello that track the progress and set realistic deadlines.

2.3 - Chosen Tools and Techniques

Software and Hardware

The software that I'll be using is Adobe Animate or Blender, which will run on the college computers. It has all the tools that I need to create an animation for my project.

For the hardware, I'll be using a Dell OptiPlex 3090, which has 16GB of RAM, 256GB of storage space, and an Intel UHD Graphics 630. These specs will provide the performance I need for smooth animation rendering and efficient workflow.

How they align with the client brief

Software: Adobe Animate

Adobe Animate is a great tool for creating animations, and it's easy to use for making colourful and fun visuals, which is perfect for the target audience of children aged 7 to 9. The software lets me add sound effects and music, which are required by the client, it needs to be flexible enough to make sure that the animation has a fun vibe without being too scary or negative.

Hardware: Dell OptiPlex 3090

The Dell OptiPlex 3090 is a powerful computer with enough memory, 16GB of RAM, and a system storage of 256GB to handle all the animation files and tools needed. The Intel UHD Graphics 630 does help to ensure that the animation runs smoothly without any lags or crashes, which is important for keeping the project on track and meeting the deadline. The specs are also supported by testing and improving the animation to ensure it works well and looks great when watching the animation.

2.4 - Methodology Selection & Justification

Project methodology selection

For this animation project, I have chosen the Agile methodology because it is flexible, adaptable, and follows an iterative process. It allows for continuous feedback and improvements, making it a great fit for creative projects where requirements and technology may change during development.

Justification of chosen methodology

I chose Agile for this animation project because it is flexible, which allows changes to be made throughout development. Instead of following a strict plan from start to finish, Agile lets me adjust and improve the animation based on feedback. This is important for creative projects, as ideas may change, and new techniques or tools might need to be added. It also helps to keep the project relevant to the audience by making sure their needs are considered at different stages when doing the animation.

Since IT projects often involve new technologies, Agile makes it easier to integrate updates and improvements without causing major delays when developing an animation.

Breakdown of project phases

Planning and Coming up with Ideas:

- I must decide what the animation will be about and who it's for.
- I will need to figure out what makes it work and any possible challenges.
- I would need to make a rough plan of the tasks and a timeline for it.

Sketching and Creating Assets:

- I will need to draw a rough version of the key scenes and how they will flow in the animation.
- I will design characters, backgrounds and any other parts that need to be in the animation.
- I will collect any extra resources like sound effects or music.

First Version of the Animation:

- I will start animating a simple movement and main scenes.
- I will focus on getting the basic actions right.
- I will try different styles if I need to before finalising the look.

Checking and Getting Feedback:

- I will be showing the animation to others (Team members, users or stakeholders).
- I will gather feedback on what works and what I need to improve the animation.
- I will make the necessary changes based on the suggestions from the feedback.

Improving and Polishing the Animation:

- I will make the animation smoother and add effects to it.
- I will adjust the timing and flow of the scene so everything looks natural.
- I will keep testing and refining until the animation looks good.

Fina Touch and Completion:

- I will render the final version of the animation.
- I will do the last quality check to fix any small issues.
- I will hand over the finished project after making the animation.

2.5 - Feasibility Study

Introduction to the project

I am working as a junior animator at a small digital media studio, where I have been assigned to develop an animation for a charity. The charity's goal is to encourage children to cycle safely, and the animation will focus on promoting helmet safety for children aged 7 to 9 years old.

Overall description

The animation will be hosted on the charity's website, ensuring accessibility for its target audience, and it needs to be colourful and engaging while incorporating music and sound effects to maintain children's attention. Although it will highlight the risks of not wearing a helmet, the tone will remain positive rather than frightening, and the final animation should have a runtime of 1.5 to 2 minutes and must be completed within a budget of £25,000.

Requirements specification

The requirements to complete this project, I will need:
Software & Tools that an Animation software (e.g., Adobe Animate, Toon Boom Harmony), sound editing tools, and graphic design applications.
Hardware with a high-performance computer with sufficient processing power for animation rendering.
Human Resources that possibly collaborate with sound designers, scriptwriters and voice actors.
Time Management to a clear production schedule to meet the deadline.

Success criteria

The animation will be considered successful if:
It will need to deliver the helmet safety message effectively in an engaging and child-friendly way.
It will need to be visually appealing, with high-quality animation, sound and music to engage them with the safety of wearing a helmet.
It will need to align with the charity's requirements, stay within budget, and be completed within the planned time frame.

Preferred solution selection (chosen animation method and project methodology)

For this project, I have chosen 2D digital animation due to its flexibility, cost-effectiveness and ability to create appealing visuals for young audiences. I will use the Agile methodology to manage the project, as it allows for iterative development, continuous feedback and easy adjustments based on the charity's input.

3. Pre-Production & Design

3.1 - Project Brief

Purpose of the digital animation and effects product:

The purpose of this animation is to educate children aged 7 to 9 about the importance of wearing a helmet while cycling, and it will show why helmets are necessary, how they help prevent injuries and encourage safe cycling habits. The animation will be engaging, colourful and fun to ensure that children enjoy watching it while learning an important safety lesson.

How it meets client needs:

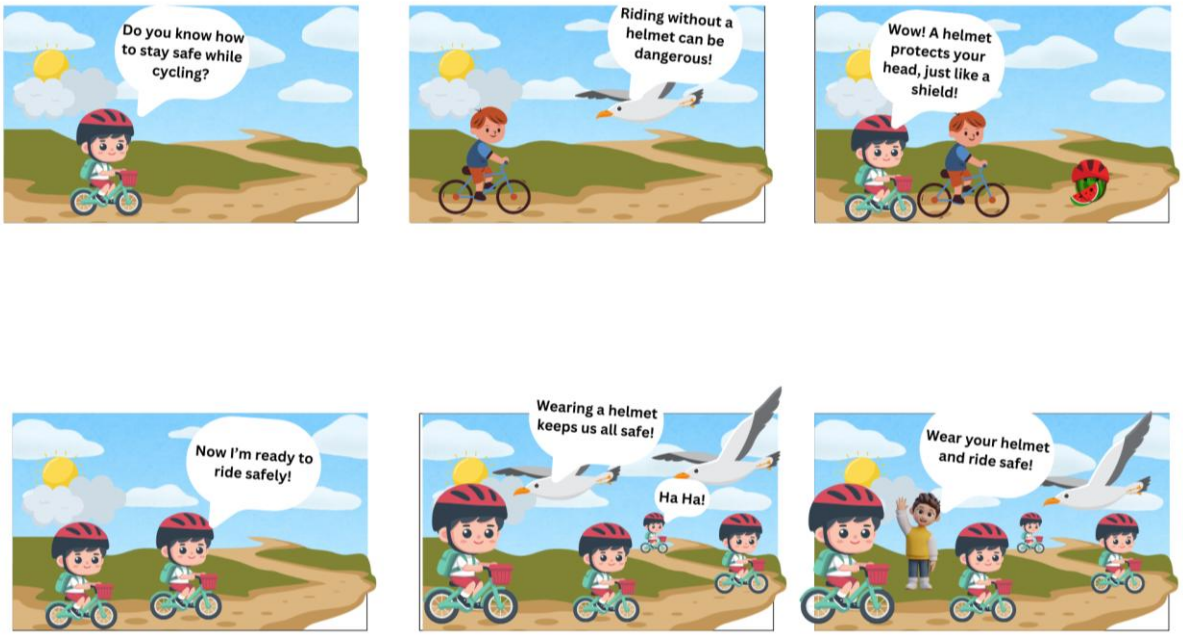
The client has said that a charity that promotes cycling safety needs an animation that effectively delivers a helmet safety message in a way that is suitable for young children. To meet these needs, the animation will:

- It must use bright colours, smooth animations and appealing characters to keep children engaged.
- It needs to include music and sound effects to make it more entertaining.
- It must maintain a positive tone to avoid scaring children while still showing the importance of wearing a helmet.
- I will need to be short, about 1.5 to 2 minutes, to hold young viewers' attention.
- Then, it will need to be designed to fit within the £25,000 budget and meet the client's deadline.

3.2 - Storyboard Designs

Here is the layout that I have used to make my storyboard design:
https://www.canva.com/design/DAGfrdvr_O8/Tu08N8GemJ30-nbt3d-Mhw/view?utm_content=DAGfrdvr_O8&utm_campaign=designshare&utm_medium=link2&utm_source=uniquelinks&utlId=heedef0e825

Visual representation of the animation



Storyboard Scene Descriptions
The animation will have six scenes, each showing a different part of the helmet safety message. The background will remain consistent throughout, featuring a blue sky, a sun, and a sea over the hills to create a bright and engaging atmosphere for young children.

Scene 1: Introduction
- The main character, a cheerful child, is riding their bike along a path and waves at the audience.
- They introduce themselves and ask, “Do you know how to stay safe while cycling?”
- The scene has happy, upbeat music to set a fun tone.

Scene 2: The Problem
- The child is now cycling without a helmet while a friendly talking bird appears nearby.
- The bird looks concerned and says, “Riding without a helmet can be dangerous!”
- The background music changes slightly to a more cautious tone to highlight the risk.

Scene 3: The Danger
- A fun demonstration shows a watermelon falling and cracking without a helmet, compared to another that stays safe with a helmet.
- The child reacts with surprise and says, “Wow! A helmet protects your head, just like a shield!”
- A fun "boring" sound effect is used when the helmet saves the watermelon.

Scene 4: The Solution
- The child puts on their helmet, and it gives off a small glow or sparkles to emphasise its importance.
- They smile and say, “Now I’m ready to ride safely!”
- A magical “ding” sound effect plays as they secure the helmet.

Scene 5: Safe Riding
- The child is now riding with friends who are also wearing helmets.
- They all look happy, and the bird cheers them on, saying, “Wearing a helmet keeps us all safe!”
- The scene has cheerful background music and the sounds of kids laughing.

Scene 6: Conclusion
- The child waves at the audience with a big smile.
- A speech bubble appears, saying, “Wear your helmet and ride safely!”
- The animation ends with a short, catchy jingle to reinforce the message.

3.3 - Legal and Ethical Considerations

Copyright & Intellectual Property Rights

This is to make sure that everything in the animation is legally safe to use and that all characters, backgrounds, music, and sound effects are either original or properly licensed. The background will include a blue sky, sun and the sea over the hills that will be custom-made to avoid copyright issues, and the characters and the animations will be created from scratch to ensure the full ownership of the final product. But if any music or sound effects from a third-party source are used, it will either be royalty-free and come with the proper license, which will guarantee that the animation is legally protected and can be used without any legal trouble.

Release Forms (e.g., for assets or character designs)

Anyone outside the team who contributes to the animation, such as the voice actors, musicians, or external artists, will need to sign the release form to make sure the client has full permissions to use, modify and distribute their work.

Ethical issues (confidentiality, representation, decency, libel)

The confidentiality for the animation is that the private information shared by the client and contributors during the production, which must be kept secure and not shared without consent.

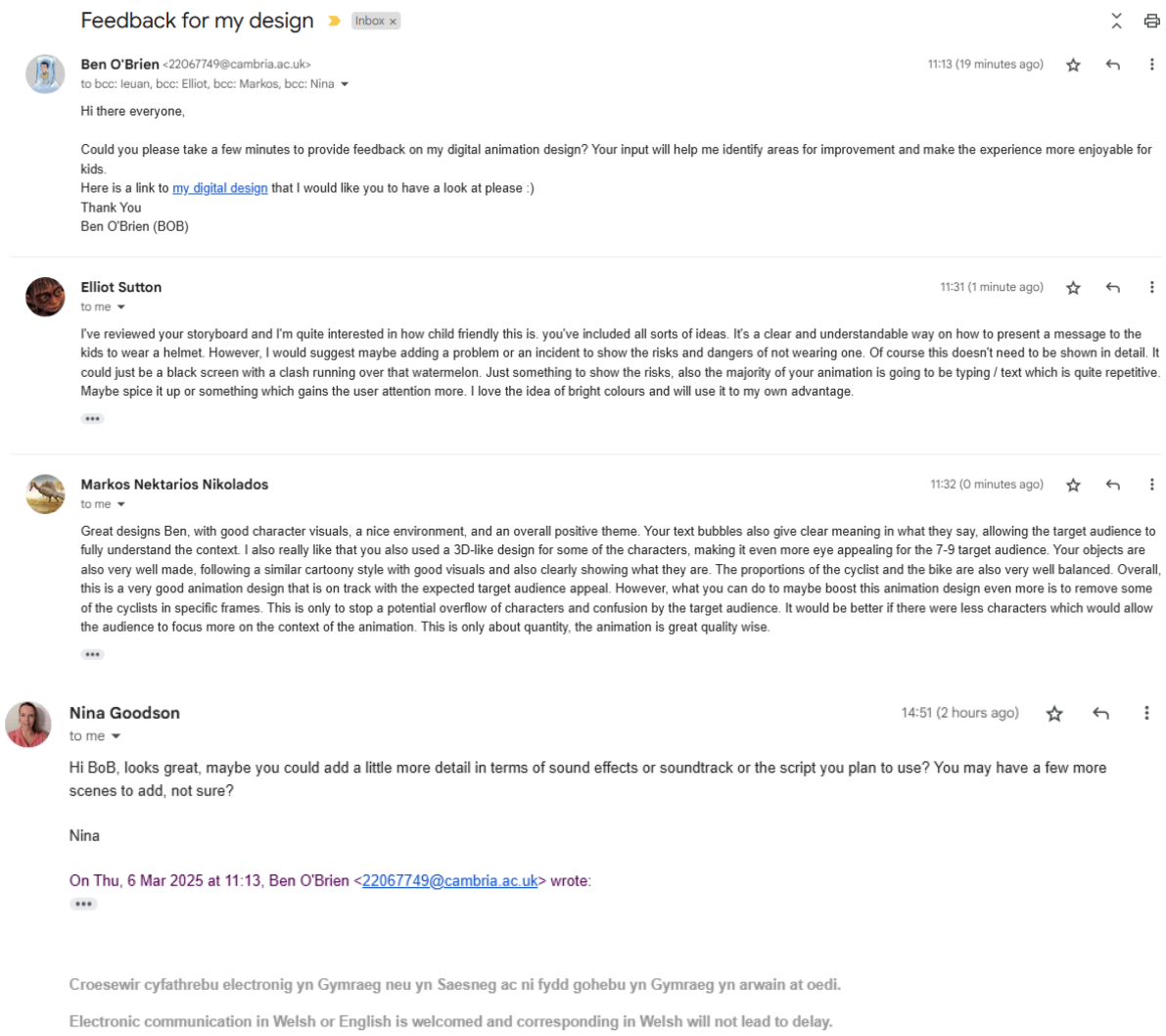
The representation for the animation will include characters that are diverse and positive, and make sure that there are no stereotypes or misrepresentations for both the child character and the friendly bird that will be designed to appeal to a wide audience and be inclusive.

The target audience is children aged 7 to 9, and all the content will be suitable for that age group. For example:

- The watermelon scene that demonstrates the dangers of not wearing a helmet should be presented in a fun and light-hearted way rather than something scary.
- The characters will behave in a friendly and encouraging manner to promote safe cycling positively.

The libel for the animation will not include any false or misleading claims that could damage the reputation of any individual, brand or organisation. For example, it will not suggest that certain helmet brands are unsafe or that riding without a helmet is against the law, unless it’s legally accurate.

3.4 - Design Review & Feedback
Peer & client review



Feedback for my design Inbox ×

Ben O'Brien <22067749@cambria.ac.uk> 11:13 (19 minutes ago)
to bcc: Ieuan, bcc: Elliot, bcc: Markos, bcc: Nina

Hi there everyone,

Could you please take a few minutes to provide feedback on my digital animation design? Your input will help me identify areas for improvement and make the experience more enjoyable for kids.
Here is a link to my digital design that I would like you to have a look at please :)
Thank You
Ben O'Brien (BOB)

Elliot Sutton 11:31 (1 minute ago)
to me

I've reviewed your storyboard and I'm quite interested in how child friendly this is. you've included all sorts of ideas. It's a clear and understandable way on how to present a message to the kids to wear a helmet. However, I would suggest maybe adding a problem or an incident to show the risks and dangers of not wearing one. Of course this doesn't need to be shown in detail. It could just be a black screen with a clash running over that watermelon. Just something to show the risks, also the majority of your animation is going to be typing / text which is quite repetitive. Maybe spice it up or something which gains the user attention more. I love the idea of bright colours and will use it to my own advantage.

Markos Nektarios Nikolados 11:32 (0 minutes ago)
to me

Great designs Ben, with good character visuals, a nice environment, and an overall positive theme. Your text bubbles also give clear meaning in what they say, allowing the target audience to fully understand the context. I also really like that you also used a 3D-like design for some of the characters, making it even more eye appealing for the 7-9 target audience. Your objects are also very well made, following a similar cartoony style with good visuals and also clearly showing what they are. The proportions of the cyclist and the bike are also very well balanced. Overall, this is a very good animation design that is on track with the expected target audience appeal. However, what you can do to maybe boost this animation design even more is to remove some of the cyclists in specific frames. This is only to stop a potential overflow of characters and confusion by the target audience. It would be better if there were less characters which would allow the audience to focus more on the context of the animation. This is only about quantity, the animation is great quality wise.

Nina Goodson 14:51 (2 hours ago)
to me

Hi BoB, looks great, maybe you could add a little more detail in terms of sound effects or soundtrack or the script you plan to use? You may have a few more scenes to add, not sure?

Nina

On Thu, 6 Mar 2025 at 11:13, Ben O'Brien <22067749@cambria.ac.uk> wrote:

Croesewir cyfathrebu electronig yn Gymraeg neu yn Saesneg ac ni fydd gohebu yn Gymraeg yn arwain at oedi.

Electronic communication in Welsh or English is welcomed and corresponding in Welsh will not lead to delay.

Evidence of feedback

The first feedback mentioned is that my animation is clear and easy for children to understand, making it an effective way to highlight the importance of wearing a helmet. However, I could improve it by adding a small scene to show the risks of not wearing one. This doesn't need to be too detailed, something simple like a black screen with a crash sound would be enough to convey the message. Since a lot of the animation relies on text, I could also include more visually engaging elements to better capture the audience's attention.

The second piece of feedback highlighted is that the design and characters work well, and the overall theme is positive. The 3D-style elements make the animation more appealing to the target audience, and the proportions of the cyclists and bikes are well-balanced. To improve it further, I could reduce the number of cyclists in some scenes to avoid clutter and help the audience focus more on the key message.

The last piece of feedback suggested is that while the animation looks good, it could benefit from additional details such as sound effects, a soundtrack, or a clearer script. It might also need a few more scenes to improve the overall flow and engagement.

3.5 - Design Improvements
Modifications based on feedback

Justification of design decisions
Making the message clear and easy to understand

My animation is designed to be simple and easy for children aged 7 to 9 to follow. I've used clear visuals and text to help them understand why wearing a helmet is important.
To make the point stronger, I will add a quick scene to show the risk of not wearing a helmet and instead of something detailed or scary for them, a black screen with a crash sound will be enough to get the message across without making it too intense for the younger viewers.

Making it visually appealing

I chose a 3D style look because it makes the animation more interesting and engaging for the children viewing it and helps keep their attention while still looking fun, and I also made sure that the characters and the bikes are the right size and proportions, so everything looks natural and realistic. However, some of the scenes might look a bit crowded, so I will reduce the number of cyclists in certain shots to make sure the focus stays on the main message.

Improving the overall experience

Adding sound effects, like bike noise, helmet clicks, and a background soundtrack, will help make the animation more engaging.
Since much of the animation relies on text, I will include more movement and visuals to keep children interested.
To make sure that the story flows well, I might add a few extra scenes to improve the pacing and make the message clearer.

4. Production & Asset Creation

4.1 - Creation of Animation

Software used

For this animation, I have chosen Adobe Animate because it allows me to import and arrange all my assets while giving me full control over the animation process.

Steps in the animation process

Setting Up the Scene

- The background features a **blue sky, hills, and clouds** to create a bright and engaging environment.

- The additional elements, such as the **sun** and a **speech bubble** for dialogue, have been included to enhance the scene.

Adding Characters and Objects

- One of my characters **waves goodbye**, with a speech bubble displaying the text **"Goodbye."**

- Other keyframe elements include a **helmet, a watermelon, and seagulls**, helping to visually reinforce key messages.

Animating Using the Timeline

- Separate **layers** have been created for **text, characters, and objects** to ensure smooth animation.

- I have used **Insert Keyframe** to introduce changes at different points in the timeline.

- Some layers contain multiple **keyframes** to control movements and synchronise dialogue effectively.

Adding Sound

- I attempted to add **voice recordings** from the library, including the "Goodbye" dialogue, but I encountered issues with playback.

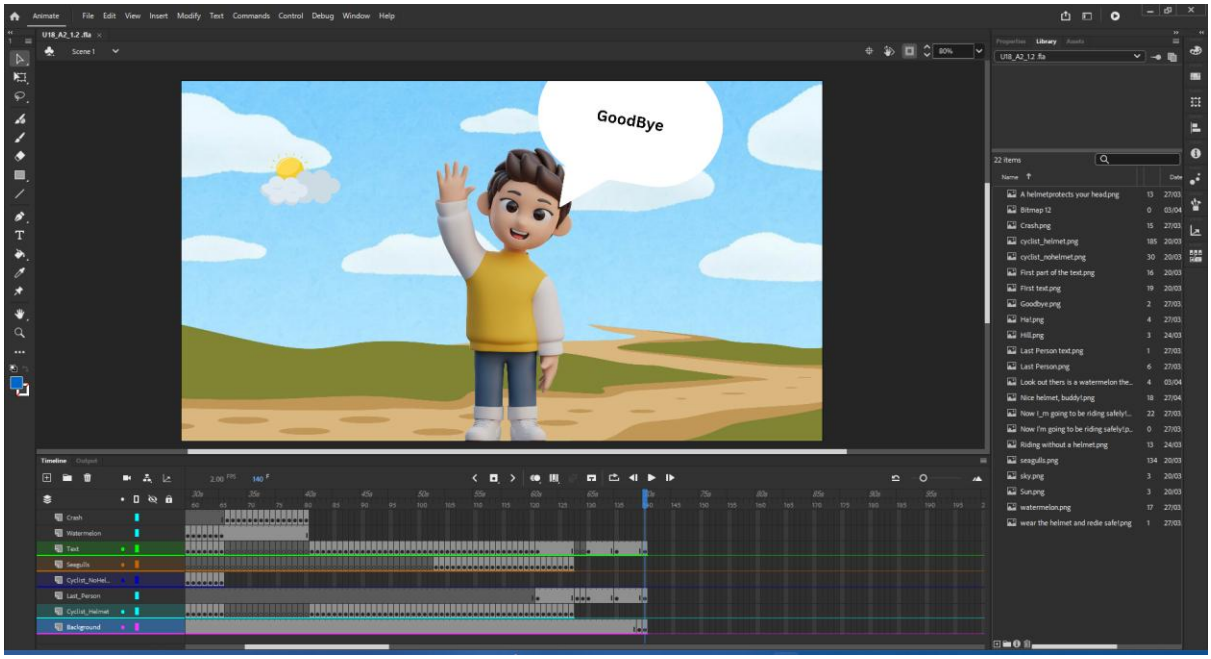
- I checked the library and placed the sound on the timeline, but it is not functioning as expected.

- Once resolved, I will sync the audio with the animation to ensure proper timing.

Timing and Frame Rate

- The animation runs at **5 frames per second (FPS)** for a smooth playback.

- The timeline extends beyond **90 frames**, allowing the scene to play for several seconds.



This screenshot shows my animation setup in Adobe Animate, and the library panel on the right contains my sound files, which include “Goodbye”, which I am trying to add to my animation.

4.2 - Assets Used

Description of asset	File name	Source	Modifications made	Where used	Copyright/Licensing
The second character - cyclist (helmet)	cyclist_helmet.png	Canva	Adjusted Pose	Throughout the animation	It is free to use with attribution if needed.
The main character - cyclist (no helmet)	cyclist_nohelmet.png	Canva	Adjusted facial expression	Before the crash scene	It is free to use with attribution if needed.
Bicycle	bicycle.png	Canva	Separated from the character	All scenes	It is free to use with attribution if needed.
Helmet	helmet.png	Canva	Separated for the animation	Falling before crash	It is free to use with attribution if needed.
Crash Text Effect	crash _text.png	Custom	Created bold impact text	Crash scene	No Restrictions
Background - Sky	sky.png	Canva	No Modifications	All Scenes	It is free to use with attribution if needed.
Background - Sun	sun.png	Canva	Adjusted position for different scenes	All scenes	It is free to use with attribution if needed.
Background - Hills	hills .png	Canva	No Modifications	All scenes	It is free to use with attribution if required.
Seagulls	seagulls .png	Canva	Minor animation added	Final Scene	It is free to use with attribution if needed.
Speech Bubbles	speech_bubble.png	Canva	Different text inside	Throughout the animation	It is free to use with attribution if needed.
Watermelon	watermelon.png	Canva	Cropped, background removed	The scene where the helmet falls off	It is licensed under Canva/free use

5. Testing & Refinement

5.1 - Test Plan & Testing Evidence

This test plan outlines what I have to test and how I can verify that it would meet the requirements for the animation.

Planned test cases

Test Case ID	Test Description	Expected Result	Pass/Fail	Screenshot Reference
TC1	To verify that the animation runs smoothly (no lag)	Animation plays without stuttering.	Pass	Screenshot 1
TC2	To check if the crash scene is displayed correctly	The background with the “Crash” text appears at the right time.	Pass	Screenshot 2
TC3	To ensure that character dialogue text appears correctly	The speech bubbles display the right text at the correct time.	Pass	Screenshot 3
TC4	To verify that character animations (cycling, helmet appearing) work as expected	The characters move smoothly, and the helmet appears properly.	Pass	Screenshot 4
TC5	To test if the sound effects and voice-over over if applicable, are synced	The sounds match the actions, such as a crash sound at impact speech when needed.	Fail	Screenshot 5
TC6	To confirm that the final message is clear, “Wear your helmet and ride safely!”	The last scene displays the correctly with a clear safety message.	Pass	Screenshot 6

Screenshots of testing:

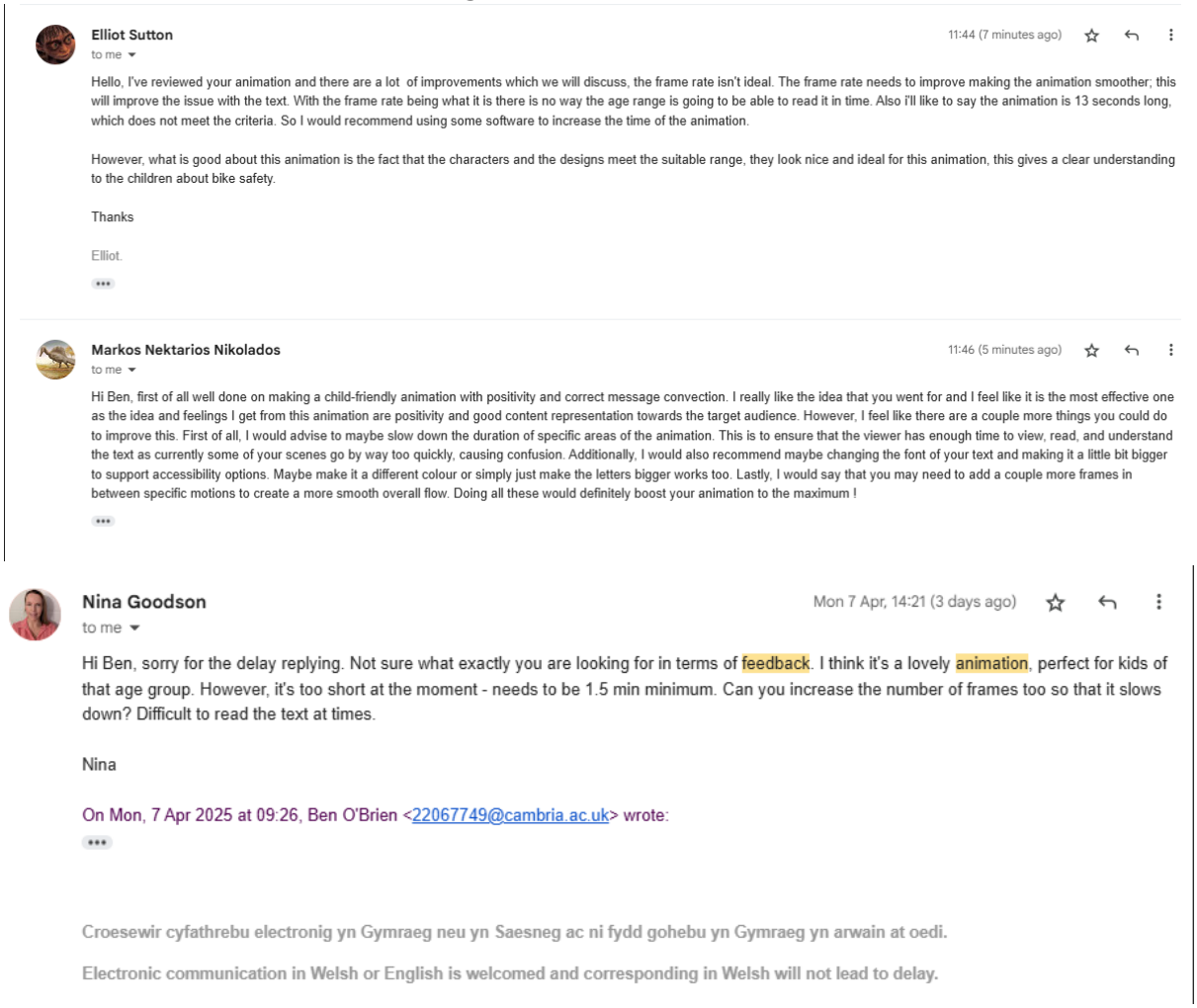
This screenshot shows the animation running smoothly

This screenshot shows the Speech bubbles appear correctly

This screenshot shows the crash scene is displayed at the right time

This final screenshot shows the final safety message

5.2 - Feedback Collection & Changes Made



Elliot Sutton 11:44 (7 minutes ago)
to me

Hello, I've reviewed your animation and there are a lot of improvements which we will discuss, the frame rate isn't ideal. The frame rate needs to improve making the animation smoother; this will improve the issue with the text. With the frame rate being what it is there is no way the age range is going to be able to read it in time. Also i'll like to say the animation is 13 seconds long, which does not meet the criteria. So I would recommend using some software to increase the time of the animation.

However, what is good about this animation is the fact that the characters and the designs meet the suitable range, they look nice and ideal for this animation, this gives a clear understanding to the children about bike safety.

Thanks

Elliot.

Markos Nektarios Nikolados 11:46 (5 minutes ago)
to me

Hi Ben, first of all well done on making a child-friendly animation with positivity and correct message convection. I really like the idea that you went for and I feel like it is the most effective one as the idea and feelings I get from this animation are positivity and good content representation towards the target audience. However, I feel like there are a couple more things you could do to improve this. First of all, I would advise to maybe slow down the duration of specific areas of the animation. This is to ensure that the viewer has enough time to view, read, and understand the text as currently some of your scenes go by way too quickly, causing confusion. Additionally, I would also recommend maybe changing the font of your text and making it a little bit bigger to support accessibility options. Maybe make it a different colour or simply just make the letters bigger works too. Lastly, I would say that you may need to add a couple more frames in between specific motions to create a more smooth overall flow. Doing all these would definitely boost your animation to the maximum !

Nina Goodson Mon 7 Apr, 14:21 (3 days ago)
to me

Hi Ben, sorry for the delay replying. Not sure what exactly you are looking for in terms of feedback. I think it's a lovely animation, perfect for kids of that age group. However, it's too short at the moment - needs to be 1.5 min minimum. Can you increase the number of frames too so that it slows down? Difficult to read the text at times.

Nina

On Mon, 7 Apr 2025 at 09:26, Ben O'Brien <22067749@cambria.ac.uk> wrote:

Croesewir cyfathrebu electronig yn Gymraeg neu yn Saesneg ac ni fydd gohebu yn Gymraeg yn arwain at oedi.

Electronic communication in Welsh or English is welcomed and corresponding in Welsh will not lead to delay.

Adjustments based on findings:
From the feedback I have received I've made a few changes to improve my animation.

One of the main points is to mention that the frame rate wasn't smooth enough, which made the text hard to read. To fix this I had to increase the frame rate to help the animation run better and make everything easier to follow.

I also extended the length of the animation as it was originally only 13 seconds and it didn't meet the time requirements. This has given me more to spread out the scenes and make sure nothing felt rushed.

Another thing I worked on was the speed of certain parts. Some of the scenes were going by too fast so I slowed them down a bit to give the viewers more time to read and understand the text properly.

I changed the font to make it a bit bigger and clearer so it's easier for everyone to read and especially younger viewers.

Lastly I added some extra frames between movements to make the animation flow more smoothly overall.

Even though I made these changes I kept the parts that were working well like the visual style and the message since both reviewers said they liked how it fits the age group and clearly showed the message about bike safety.

6. Project Management & Evaluation

6.1 - Project Planning & Resource Management

Task plan:

My U9_&_18 - Project Management in action and Design and develop a digital animation and effects product

Main Part

Name	Description	Start Date	Due Date	Status	Progress tracking
Front sheet	Prepare front sheet with key project info	2025-02-13	2025-02-13	Done	100%
1. Introduction	Brief overview of project goals	2025-02-13	2025-02-13	Done	100%
		2025-02-13	**2025-02-13**		**100%**

2. Research and Initial Planning

Name	Description	Start Date	Due Date	Status	Progress tracking
2.1 - Comparison of Two Possible Solutions	Stop Motion vs. Frame by Frame (or other options) Explanation of each method Pros and cons Screenshots of research findings	2025-02-18	2025-02-17	Done	100%
2.2 - Risk Assessment for Both Solutions	Identify at least 2 external risks Identify at least 2 internal risks and Risk control measures (Risk Assessment)	2025-02-17	2025-02-17	Done	100%
2.3 - Chosen Tools and Techniques	Software and hardware selected and How they align with the client brief	2025-02-17	2025-02-17	Done	100%
2.4 - Methodology Selection & Justification	Project methodology selection (Waterfall, Agile, or Hybrid?) Justification of chosen methodology Breakdown of project phases Initial task plan (Gantt chart, task dependencies)	2025-02-17	2025-02-20	Done	100%
2.5 - Feasibility Study	Introduction to the project Overall description Requirements specification Success criteria Preferred solution selection (chosen animation method and project methodology)	2025-02-20	2025-02-20	Done	100%
		2025-02-17 to 2025-02-20	**2025-02-20**		**100%**

3. Pre-Production & Design

Name	Description	Start Date	Due Date	Status	Progress tracking
3.1 - Project Brief	Purpose of the digital animation and effects product and How it meets client needs	2025-02-20	2025-02-20	Done	100%
3.2 - Storyboard Designs	Visual representation of the animation and Description of keyframes	2025-02-21	2025-03-03	Done	100%
3.3 - Legal and Ethical Considerations	Copyright & Intellectual Property Rights Release Forms (e.g., for assets or character designs) Ethical issues (confidentiality, representation, decency, libel)	2025-03-03	2025-03-03	Done	100%
3.4 - Design Review & Feedback	Peer/client review and Evidence of feedback	2025-03-04	2025-03-06	Done	100%
3.5 - Design Improvements	Modifications based on feedback and Justification of design decisions	2025-03-06	2025-03-10	Done	100%
		2025-02-20 to 2025-03-06	**2025-03-10**		**100%**

4. Production & Asset Creation

Name	Description	Start Date	Due Date	Status	Progress tracking
4.1 - Creation of Animation	Software used Steps in the animation process	2025-03-20	2025-03-31	Done	100%
4.2 - Assets Used	Original vs. ready-made assets Source list of ready-made assets Legal considerations (copyright, licensing)	2025-03-20	2025-03-31	Done	100%
		2025-03-20	**2025-03-31**		**100%**

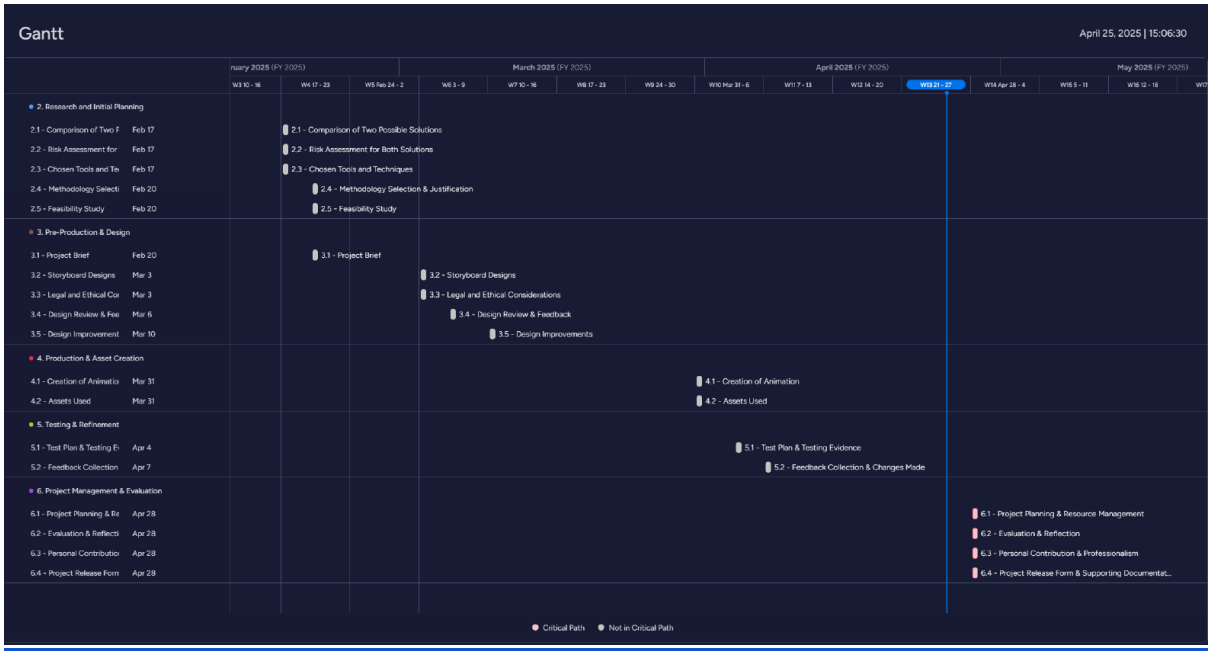
5. Testing & Refinement

Name	Description	Start Date	Due Date	Status	Progress tracking
5.1 - Test Plan & Testing Evidence	Planned test cases Testing against client requirements and Screenshots of testing	2025-04-04	2025-04-04	Done	100%
5.2 - Feedback Collection & Changes Made	Peer/client feedback Adjustments based on findings	2025-04-04	2025-04-07	Done	100%
		2025-04-04	**2025-04-07**		**100%**

6. Project Management & Evaluation

Name	Description	Start Date	Due Date	Status	Progress tracking
6.1 - Project Planning & Resource Management		2025-02-13	2025-04-28	Working on it	0%
6.2 - Evaluation & Reflection	The success of the project against the criteria Challenges faced and how they were addressed and Recommendations for future improvements	2025-04-28	2025-04-28	Not Started	0%
6.3 - Personal Contribution & Professionalism	Individual responsibilities in the project Time management and task completion Evidence of leadership, accountability, and teamwork	2025-04-28	2025-04-28	Not Started	0%
6.4 - Project Release Form & Supporting Documentation	Communication logs Project completion sign-off	2025-04-24	2025-04-28	Working on it	0%
		2025-02-13 to 2025-04-28	**2025-04-28**		**0%**

Gantt Chart:



Resources & costings:

My U9_&_18 - Budget

2. Research and Initial Planning

Name	Description	Start Date	Due Date	Hours	Cost
2.1 - Comparison of Two Possible Solutions	Stop Motion vs. Frame by Frame (or other options) Explanation of each method Pros and cons Screenshots of research findings	2025-02-13	2025-02-17	10	£300.00
2.2 - Risk Assessment for Both Solutions	Identify at least 2 external risks Identify at least 2 internal risks and Risk control measures (Risk Assessment)	2025-02-17	2025-02-17	8	£250.00
2.3 - Chosen Tools and Techniques	Software and hardware selected and How they align with the client brief	2025-02-17	2025-02-17	10	£500.00
2.4 - Methodology Selection & Justification	Project methodology selection (Waterfall, Agile, or Hybrid?) Justification of chosen methodology Breakdown of project phases Initial task plan (Gantt chart, task dependencies)	2025-02-17	2025-02-20	12	£400.00
2.5 - Feasibility Study	Introduction to the project Overall description Requirements specification Success criteria Preferred solution selection (chosen animation method and project methodology)	2025-02-20	2025-02-20	10	£500.00
		2025-02-13 to 2025-02-20	**2025-02-20**	**50**	**£1,950.00**

3. Pre-Production & Design

Name	Description	Start Date	Due Date	Hours	Cost
3.2 - Storyboard Designs	Visual representation of the animation and Description of keyframes	2025-02-21	2025-03-03	25	£1,200.00
3.3 - Legal and Ethical Considerations	Copyright & Intellectual Property Rights Release Forms (e.g., for assets or character designs) Ethical issues (confidentiality, representation, decency, libel)	2025-03-03	2025-03-03	10	£700.00
3.4 - Design Review & Feedback	Peer/client review and Evidence of feedback	2025-03-04	2025-03-06	15	£800.00
3.5 - Design Improvements	Modifications based on feedback and Justification of design decisions	2025-03-06	2025-03-10	30	£1,300.00
		2025-02-21 to 2025-03-06	**2025-03-10**	**80**	**£4,000.00**

4. Production & Asset Creation

Name	Description	Start Date	Due Date	Hours	Cost
4.1 - Creation of Animation	Software used Steps in the animation process	2025-03-20	2025-03-31	100	£6,000.00
4.2 - Assets Used	Original vs. ready-made assets Source list of ready-made assets Legal considerations (copyright, licensing)	2025-03-20	2025-03-31	50	£4,000.00
		2025-03-20	**2025-03-31**	**150**	**£10,000.00**

5. Testing & Refinement

Name	Description	Start Date	Due Date	Hours	Cost
5.1 - Test Plan & Testing Evidence	Planned test cases Testing against client requirements and Screenshots of testing	2025-04-04	2025-04-04	20	£1,200.00
5.2 - Feedback Collection & Changes Made	Peer/client feedback Adjustments based on findings	2025-04-04	2025-04-07	35	£1,800.00
		2025-04-04	**2025-04-07**	**55**	**£3,000.00**

6. Project Management & Evaluation

Name	Description	Start Date	Due Date	Hours	Cost
6.1 - Project Planning & Resource Management		2025-02-13	2025-04-28	25	£1,000.00
6.2 - Evaluation & Reflection	The success of the project against the criteria Challenges faced and how they were addressed and Recommendations for future improvements	2025-04-28	2025-04-28	15	£800.00
6.3 - Personal Contribution & Professionalism	Individual responsibilities in the project Time management and task completion Evidence of leadership, accountability, and teamwork	2025-04-28	2025-04-28	40	£2,200.00
6.4 - Project Release Form & Supporting Documentation	Communication logs Project completion sign-off	2025-04-28	2025-04-28	30	£2,000.00
		2025-02-13 to 2025-04-28	**2025-04-28**	**110**	**£6,000.00**

Total

445	**£24,950.00**

6.2 - Evaluation & Reflection

- The success of the project against the criteria
- Challenges faced and how they were addressed
- Recommendations for future improvements

6.3 - Personal Contribution & Professionalism

- Individual responsibilities in the project
- Time management and task completion
- Evidence of leadership, accountability, and teamwork

6.4 - Project Release Form & Supporting Documentation
Project completion sign-off

PROJECT DELIVERY SIGN-OFF FORM

PROJECT NAME

Project Management in action and Design and develop a digital animation and effects product

PROJECT MANAGER	PROJECT START DATE	PROJECT END DATE
Nina Goodson	13 Feb 2025	28 Apr 2025

PROJECT SUMMARY

In this project, the client is a charity that encourages children to cycle, and they require an animation that promotes helmet safety for children aged **7 to 9 years old**.

The animation will be featured on the charity's website and it must be colourful and engaging and include music and sound effects. While it should highlight the dangers of not wearing a helmet, the tone should remain positive and not overly frightening.

The animation should be going to be **1.5 to 2 minutes** long and completed within a budget of **£25,000**. To meet the client's needs we needed to research animation techniques, assess risks, plan resources and apply appropriate tools and methodologies to manage the project effectively.

DELIVERABLES

DELIVERABLE	PLANNED	ACTUAL	COMMENTS
Research and Initial Planning	13/02/2025 to 22/02/2025	22/02/2025	I have looked at the different animation methods and compared them to see what would work best and I also did a risk assessment, planned the project timeline and explained why the project was doable.
Pre-Production & Design	21/02/2025 to 10/03/2025	10/03/2025	I have created storyboards and planned the visual style and I thought about things like copyright and ethics. I also made the changes to my designs based on the feedback from others.
Production & Asset Creation	20/03/2025 to 31/03/2025	31/03/2025	I have made the animation using the right software and used assets that were made by me or were free to use legally and I followed the plan and stuck to the style I have designed earlier.
Testing & Refinement	04/04/2025 to 07/04/2025	07/04/2025	I have tested the animation to make sure it meets the project goals and I have asked for feedback and then made some updates to improve it based on what the people have said to change or update.