3D Solar system – Space Travel

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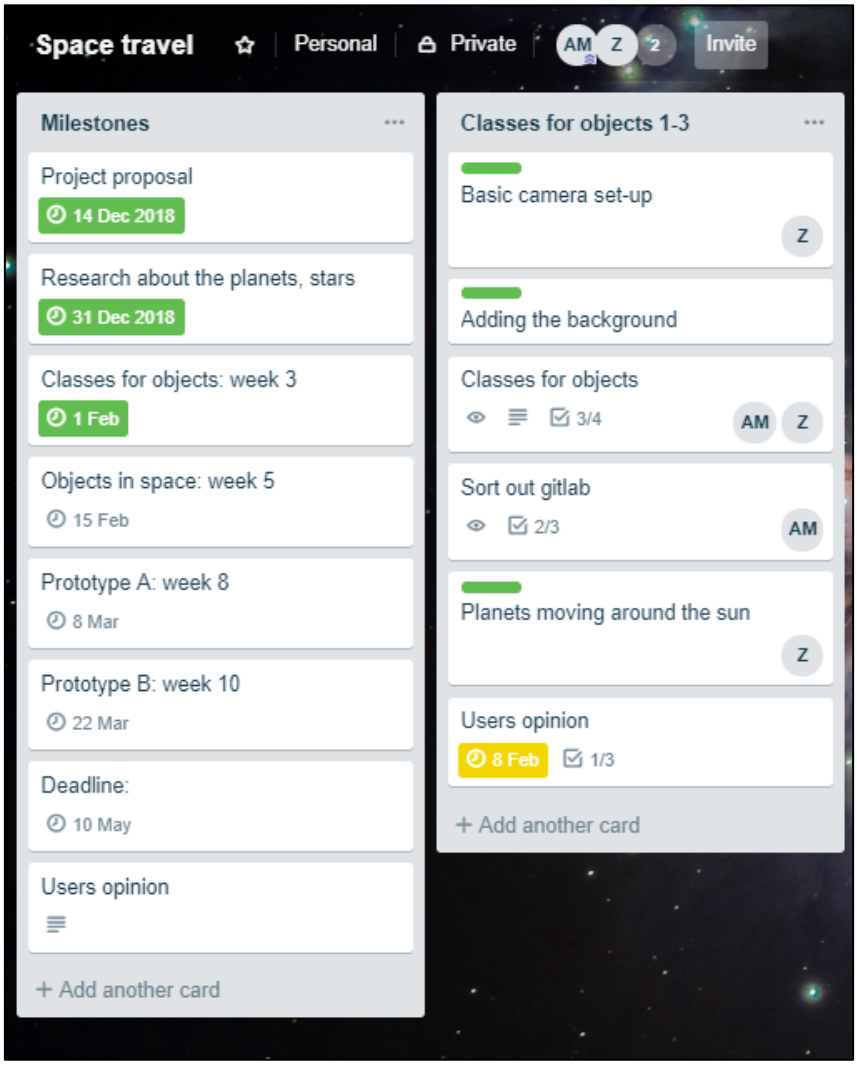
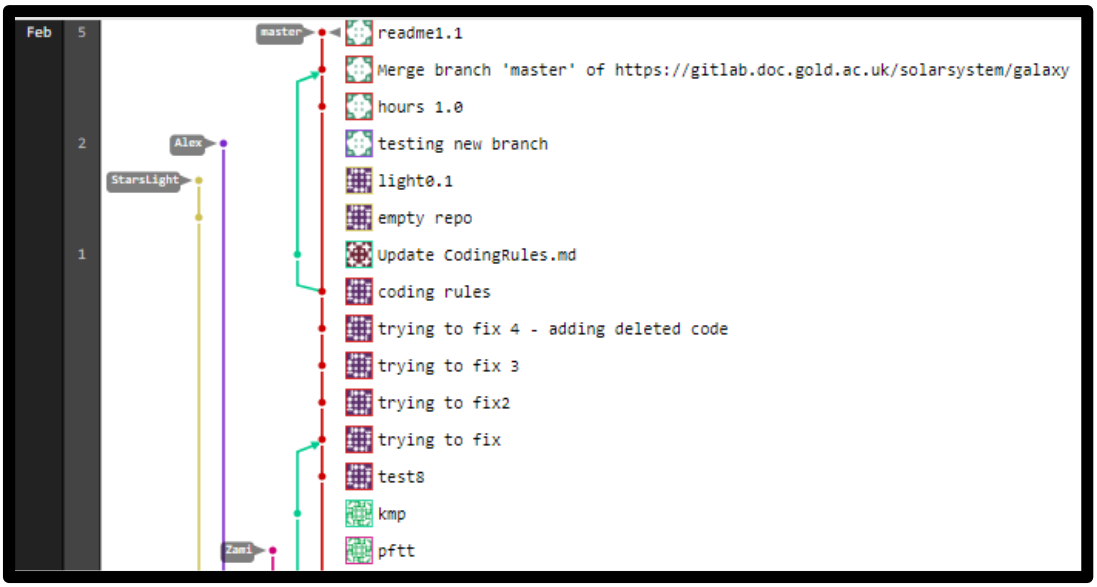
Week 3
Critique/Playtest Report: Project in Pieces



In weeks 1-3, we almost achieved all our milestones. We had to adjust some tasks and some of them swap with the next step, so the work on the project can go smoothly. Firstly, we decided to create a new GitLab repository for our project, because our research was about penguins. We set the milestones, created branches, set the coding rules and created the Excel document where we are uploading hours which we spent on the project so far. We also managed to do our research about solar system.

We successfully coded our basic prototype of solar system. At the beginning we set up the OfEasyCamera, so we could see everything clearly. The planets are moving around the sun with different speeds and have textures. In separate files, we coded star system and black hole. Our objects so far have only simple lighting, but we are planning to change it to more advanced in next steps.

To sum up, we would say that our work is moving in the right direction. The most difficult part so far for us was setting up the GitLab. We created and delated many branches, but right now we feel confident enough with using GitLab. Although, we spent lots of time on organisation, we believe it will only help us to achieve our goals.



Users opinion

#1. Malaika and Manuela – Creative Computing

The app to design shoes/sneakers

Feedback on our Project:

Malaika and Manuela liked our project and what've done so far, the planets movement, the textures, the star system and the black hole. They loved the idea that the interface will look like a spaceship.

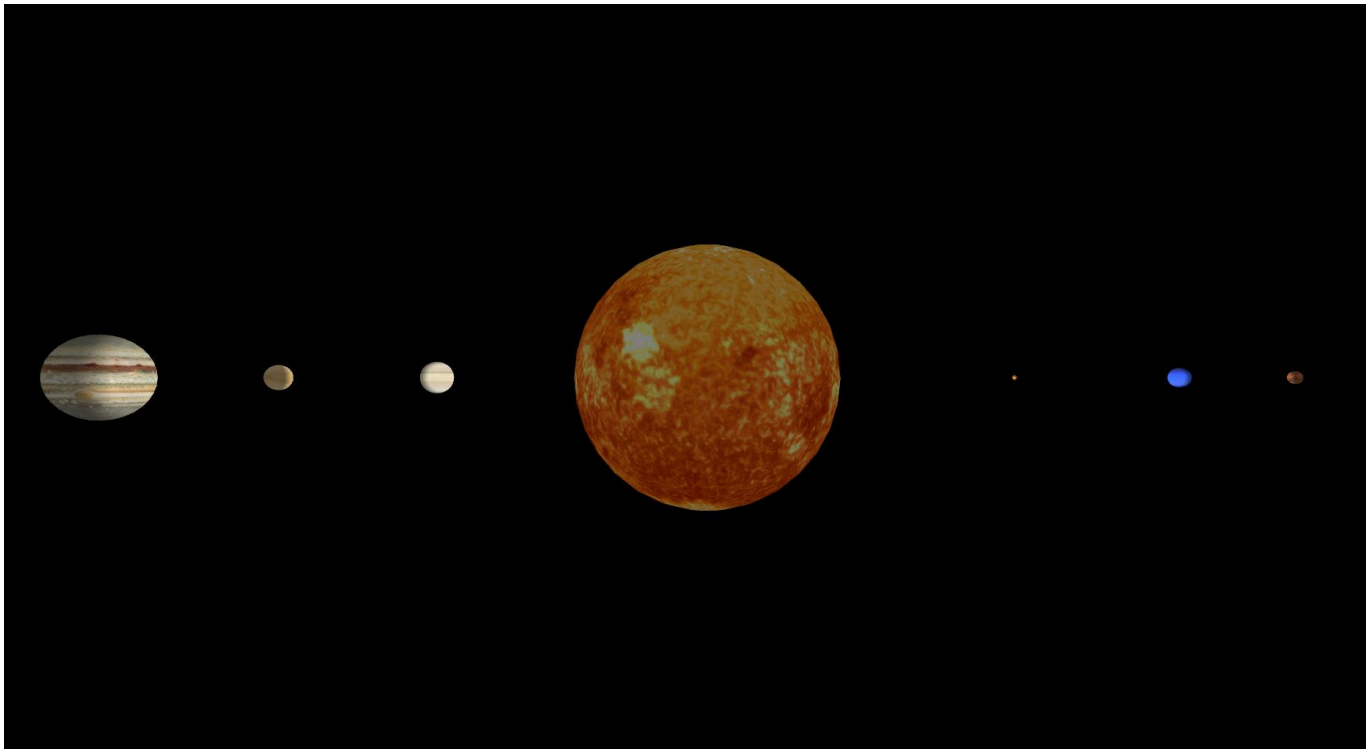
They suggested to add the ring to the Saturn. As part of the perception and multimedia project Malaika used torus function in p5.js to create the ring. Unfortunately, in OpenFrameworks this function doesn't exist, but there are many tutorials to create the torus with openGL, so we would like to give it a try. They advised us to add more lighting and improve camera movement. We planned to do that anyway, but it's good to know that our plans meet users' requirements.

Finally, Malaika and Manuela shared with us a piece of good advice – to treat this project as our actual, professional job, even if it won't be realised anywhere. It helps to stay motivated, focused and achieve next milestones.

Our feedback

They work is really detailed and well planned. They knew the answers to every question we asked. The prototype which they had created in the photoshop looks amazing. They cut a pair of shoes to check how exactly the layout is set up, and we think it shows dedication to their work. Their project looks very impressive and has the potential to be used professionally.

We suggested to add the option that user can change the colours of already available materials in the app. It's worth to mention that Malaika and Manuela designed all the textures by themselves. Additional feature could be allowing users to add their own textures for materials.



#2. Julian – Digital Art Computing

The project about hollow projection

Feedback on our Project

- Our camera movement might be difficult to achieve, referencing to the object/Planet selection feature. That is when a planet is clicked the camera slowly moves towards the planet and then user can see the description and have some interaction with the planet/object
- Functionality might be a problem
- Asteroids – Spawn asteroids shooting at random X and Y direction but same Z direction however with different speeds, click anywhere on the screen to spawn an asteroid
- Good stable concept

And so we plan to add the moving asteroid feature to our project it seems like a great idea and increases the user interaction which can involve the user with the app a bit more. We are trying to fix the camera movement and make it more user friendly. Also, we are trying to plan out the object selection feature since its really can be challenging to achieve.

Our feedback

His project involves projecting a live image of the user onto a hollow screen, a screen of fishing wires in this case getting an effect of a live hologram. To begin with it is a great idea because he is trying to replicate a technology that is fully not available yet, except in movies. However, the filter that he coded which is brilliant, may as well become a challenging fact for the project since he is planning on projection on a hollow screen and the filter is very rich in while colour so the environment lighting will play a great role in his project looking good and usable.

- Great idea involving projection on transparent wires (fishing wires)
- It's amazing, because it shows the displays the users in through a futuristic filter, projecting their live images on a hanging fishing wire. Which potentially can achieve the effect of having a live hologram
- It's very futuristic since it involves hologram, a technology yet not completely achieved.
- Change the colour of the filter to something a bit darker, and make sure that the light won't be too intense yet not too dark since it uses a camera to get a live image of the user and the filter increases the need of proper lighting cause camera
- Adding user interactions, so they can change the colour of the filter for example

#3. Michael and Athar– Creative Computing

The app which takes weather data and transform it into music

Feedback on our Project

They were positive about our Solar System. In their opinion it is a great opportunity to educate kids at school, so they will be interested in the topic, because it is an interactive simulation. They liked that the sun has an emissive light which is giving the shadows for the planets, so it looks incredibly realistic.

One of the most useful things they said is that we could try to adjust our space travel application, so the user can not only travel from the solar system to different planets but travel from one planet to another one as well without going back to the solar system map. It would be a great choice to make it look even more realistic. We would like to give it a try, but we must see first how difficult it will be to code the camera movement at first. They proposed us to add moons so it would look more accurate.

Our feedback
The project that Michael and Athar are working on involves audio. They will take weather data from the database and then they will transform that data into music. We really like that idea, but what we are missing the most is interface and we would love to see some user interactions in that project.

One of our ideas to improve the User Interface is to add some background which refers to changing weather. Additionally, they could add the sound wave at the bottom, so the user can not only hear the changes, but also see them as well.

#4. Ethen(lecturer) - *Dept. of Electrical and Electronic Engineering (Ahsanullah University of Science and Technology)*

Feedback on our Project:

- It would be easier to understand the movement of the planets if their corresponding orbits were visualized
- Using line callouts to identify the name of the planet will improve user experience
- An angled view or top view would be preferable for the user
- Improving graphics of the black hole
- Visualization of a black hole sucking in an object or merging of two black holes

Adding a corresponding orbit to each planet seems to be a good idea. We plan to do it as soon as we make sure we have the planet distance and speed set at a relatively realistic way. He also mentioned the camera movement issues that shows how important this function. So, for the current plan with the camera movement we are struggling a bit however we have a backup plan which looks and feels comfortable as well for the camera movement functionality. That is if we fail to achieve the camera adjustment and movement in our current method, we will go on with the backup plan. And as to improving graphics for the blackhole we still plan to try a few things to make it look a bit more realistic including the effect he described of a blackhole sucking in close by objects. He also spoke about putting all these together and making it look decent at the same time since positioning to many objects on the screen may make it a bit packed and he also spoke about the background which is currently empty and should be filled with stars and other space objects. We plan to do that as we are now working on our star system as well as background stars. Over all he thinks it's an interesting project and asked me to let him review future versions including the final one.