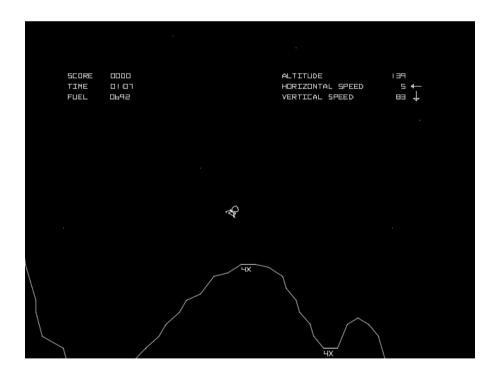JÖNKÖPING UNIVERSITY
School of Engineering

Planning Document Lunar Lander

A game made in JavaScript and p5canvas inspired by [Lunar Lander](#) (1979 video game).

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A brief introduction to the game and rules

Are you ready for a journey? Join the legendary game in which you land in the space! Nothing looks the same anymore and you are the one that was given an emergency mission to land on the Moon with the rocket. **Lunar Lander** is a great single-player arcade game inspired by original Lunar Lander (video game from 1979). The player controls the rocket viewed from the side and attempts to land safely on the Moon. The player can control the rocket with the keyboard, attempting to gently land on marked area using certain speed. The game resets after every successful landing or crash.

Unique selling proposition (USP)

The game visuals will be quite unusual because of the use of background animations. Since I am not the best graphic designer, I want to experiment with generative art in JavaScript to make my game visually appealing and test all the fun things I have learned from different YouTube channels.

Code of Conduct for me, myself, and I

1. I want to create a game that is going to be a fun process for me to develop.
2. I put more attention to definitions and what kind of JavaScript I have behind the code, so I am more prepared for the presentation of the game.
3. I quote inspirations and mention people that helped me on the way.
4. I want to test out some new background animations, they are going to be my main focus along with the game mechanics.
5. I want my game to look visually appealing.
6. I divide my work in separate sections and JavaScript files and then combine everything together.

Must haves:

- Starting screen;
- Game over screen;
- Winning screen;
- Rocket drawing;
- Main animation;
- Moon drawing;
- Controllable rocket with 4 arrows;
- Integrated states (when someone lost/won game they should be able to restart it);

Extra features:

- Moving flame in the rocket;
- Secondary animation;

Conclusions after coding the game:

- Coding in separate files is the most stupid idea ever. Will never ever do it again... I lost a lot of time on that, should have started coding everything in one file from the very beginning;
- Started liking animations and their creation in JavaScript;
- Need to work a bit more on optimising my code in the future.

Schedule

Week 1	Week 2	Week 3	Week 4
Game idea development	Game mechanics	Details in graphic design and coding	HTML and CSS (if needed) integration
Planning document with the pitch for my game in it	Must have elements coding	Fixing bugs	Preparation for the presentation
Lab help regarding the game dynamics and more advanced JavaScript concepts	Screens layout coding	Comments, code optimization	Fixing bugs
Create GitHub repository	Secondary animation	Screens layout implementations	GitHub commits of ready elements
Main animation	Lab help regarding the game dynamics and more advanced JavaScript concepts	Lab help regarding the game dynamics and more advanced JavaScript concepts	Lab help regarding the game dynamics and more advanced JavaScript concepts
	Integration between the JavaScript documents		