What I’m making:

I’m making “Asteroids” a classic arcade game that I thought would be fun and challenging to remake in processing, I know that I’ll have to make some tweaks as I’m not sure if some of the mechanics in Asteroids are feasible to do inside of processing.

For all GitHub commits in a nice list follow [[This Link]](https://github.com/LordUK05/Asteroids225/commits/main/)

Week 1: - Fri 31st Entry

This week I put a lot of effort into getting the core system implemented (no gameplay, just making the “engine” so to speak)

Ive done the following:

* Player Movement
* Environment Rendering
* Menu Screen
* Input handling

The player maths to make it look at the mouse cursor (important for shooting enemies later)

Ive taken a few creative liberties as the original Asteroids had some mechanics that would be incredibly difficult to implement with the constraints of the processing engine, ive made the player the centre of the screen as otherwise id have to be able to cut the player model in half and rotate each part to make it “loop” around the playable area, instead I’m building an environment that kills the player if they leave the designated area

What I want to include is:

* A settings menu
* Projectiles to fire
* Enemies
* End screen
* Highscore
* A portable build (only requiring JDK 17 to run)
* Deaths
* Hover text for hints on what things do
* The gameplay loop from asteroids

GitHub links for proof:  
Jan 27:   
[First attempt to implement character rotation (Removed in latest version)](https://github.com/LordUK05/Asteroids225/commit/aa11c3551a4d5b236bd20d911ce80125e1535702)   
[Title screen implementation (Simple)](https://github.com/LordUK05/Asteroids225/commit/1af1ac831235ebc5f351862e5c6bb109210ec7a8)

Jan 28:   
[Player rotation](https://github.com/LordUK05/Asteroids225/commit/dd89fab59a34a2b1962c1bb109317f48f3708160)  
[Added movement](https://github.com/LordUK05/Asteroids225/commit/a9378cba9f13f09f1260fa0729a317f2852ae0c2) (Beta)  
Jan 29:  
[Added better movement, added basic code for “enemies”](https://github.com/LordUK05/Asteroids225/commit/b209dd559df3fca1fab413076e3dc478829e9efd)  
[Worked on scenes, added a “map border”](https://github.com/LordUK05/Asteroids225/commit/fb96deca2fb04a1516923a96a7ace35ec902f5fe)

Week 2: - 7th Feb Entry

This week was significantly less productive than week 1 as I had to put more effort into my other modules to level them out with this one however, I have still made \*some\* progress

Ive done the following:

* Added the groundwork for the environment outside of the playable area
* Clamped movement to feel smoother and “floatier” than in W1

GitHub commits:  
Feb 3rd: [Made the players hitbox debug transparent and removed the ideas I had for scaling the window (Fullscreen)](https://github.com/LordUK05/Asteroids225/commit/1f582ff723be23ad5c7b4c7c6f269385305ad228)

Feb 6th: [Synced changes made in Tuesdays class (“ive done the following” section)](https://github.com/LordUK05/Asteroids225/commit/bad4dddf7020af9d3fe0bf2fe51e6c32b662e56e)

Week 3: Friday 14th February

This week I wanted to work on the environment, I plan on using cubes to make an outside wall to keep the player contained, however I didn’t want to hand place and align each cube, so I decided to write some code for it, I didn’t manage to get all the walls finished before the end of the week. But the left and right wall have their coordinates added to the “rendering engine” and ive also added a basic enemy type, however now it seems to update its position slower than the rest of the environment, probably due to the number of objects being moved each frame and the limitations of the processing framework.

Ive done the following:

* Environment cubes
* Added enemy type, it doesn’t have ai or hit detection yet
* Wrote code to help produce environments without manually making each cube