

Who's done what?

Rebecka Staffans 21207067: Alien ship

Vincentiu : Refactoring code

Bo Tian 20211348 :

Create asteroid

Asteroid split

HP

Level up

Hyperspace

Cheng Zhang 20211342:

Create Player ship

Ship motion


Shooting

Menu - Start Game

To do

- Create isAlive property for all elements (?)
- Alien ship to appear randomly and not at all times
- Alien ships bullet to be shot in the direction of the ship
- Bullets to be deleted 1. After a certain distance 2. Or when their x or y coordinate is gamewindow.width or gamewindow.height
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- Asteroids to be created of a smaller size when they are shot
- What happens when ship is shot by alien ship bullet or collides with asteroid or with alien ship? HP -1 etc?
- Levels - change constants to variables
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- Enter username and save username and highscore. Save it in txt. read .txt
- HP is created.

Asteroids Tutorials :

 [Java Game Programming Tutorial For Beginners \(Asteroids Pt. 1\)](#)

 [Asteroids in JavaFX - Part 1](#)

Current workload split

- Chang & Albert - finish game window
- Albert - Asteroids creation
- Chang - Ship creation + turn ship
- Vincentiu - Moving, momentum, thrust and shooting
- Rebecka - Asteroids collision between asteroids and ship, alienship

Upcoming tasks:

- Alien ship creation and movement

- Animations
- High scores
- Menu
- Hyperspace

List of possible classes

- Creating the game window: Pane Class
- Creating the game window: Scene Class
- Ship creation (Polygon class)
 - setTranslateX, setTranslateY methods for initial coordinates?
 - Classes like Polygon inherit the Note (?) class, in which there's a variable rotate that describes the rotation in degrees. Any object of the Note class can be rotated with the setRotate method
- Moving the ship and turning the ship (Point2D class)
 - setRotate method is inherited for objects of the polygon class, setOnKeyPressed method, onKeyReleased event,
- Asteroids creation (Polygon class)
 - New asteroids are created and they are given new directions and speeds based on the direction and speed of the original and a random element.
- Asteroid movement (Point2D class)
- Alien ship creation (Polygon class)
- Alien ship movement (Point2D class)
- Class for collision between asteroids and ship
 - Stop method, Shape intersect method
- Animation timer class
 - Does smooth and nice rotations of elements when left and right arrows are pressed

Elements:

- Game Window
 - Menu
 - Display objects on screen
 - High Scores
- Level creation
 - How many levels?
- Score and lives left
 - Score tracker
 - Lives tracker
 - +1HP for each 10000 points
- Ship
 - Create Ship
 - Turn Ship
 - Move Ship (momentum, thruster, hyperspace jump)
 - Shoot projectile
 - isDestroyed
 - Should get new, safe location
 - -1 life
- Asteroids

- Create asteroids
 - Asteroids movements
 - Asteroids splits
- Alien Ship
 - Create alien ship
 - Move alien ship
 - Shoot projectiles
- Collision between asteroids and ship
- Collision between alien ship and ship