

Lily's Adventure

Microverse JS Capstone



Lily's Adventure

Play

Options

C

Key Controls

space



Use the direction keys to navigate
& the space key to attack

Enter your name:

Play

Score: 20

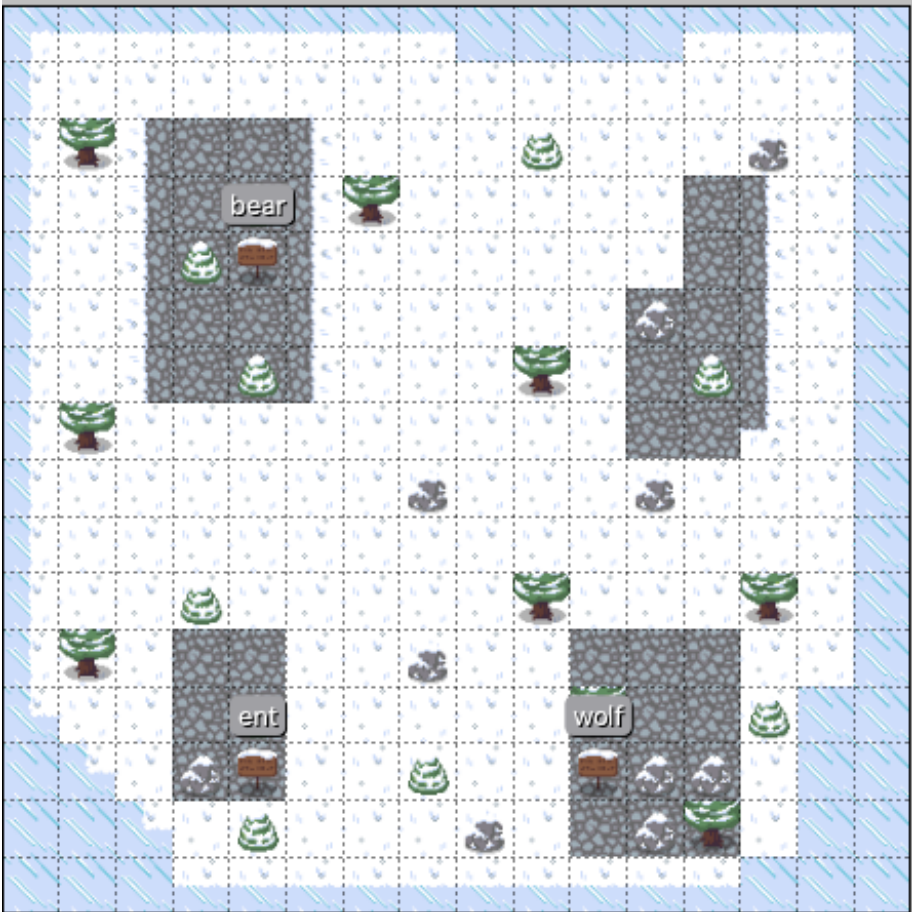


Leader Board

RANK	NAME	SCORE
1	asdfsadf	1180
2	asdfsadf	600
3	asdfasdf	440
4	sadfasdf	380
5	asdfsadfs	180
6	testing	140
7	testing4	100
8	testing2	100

Menu

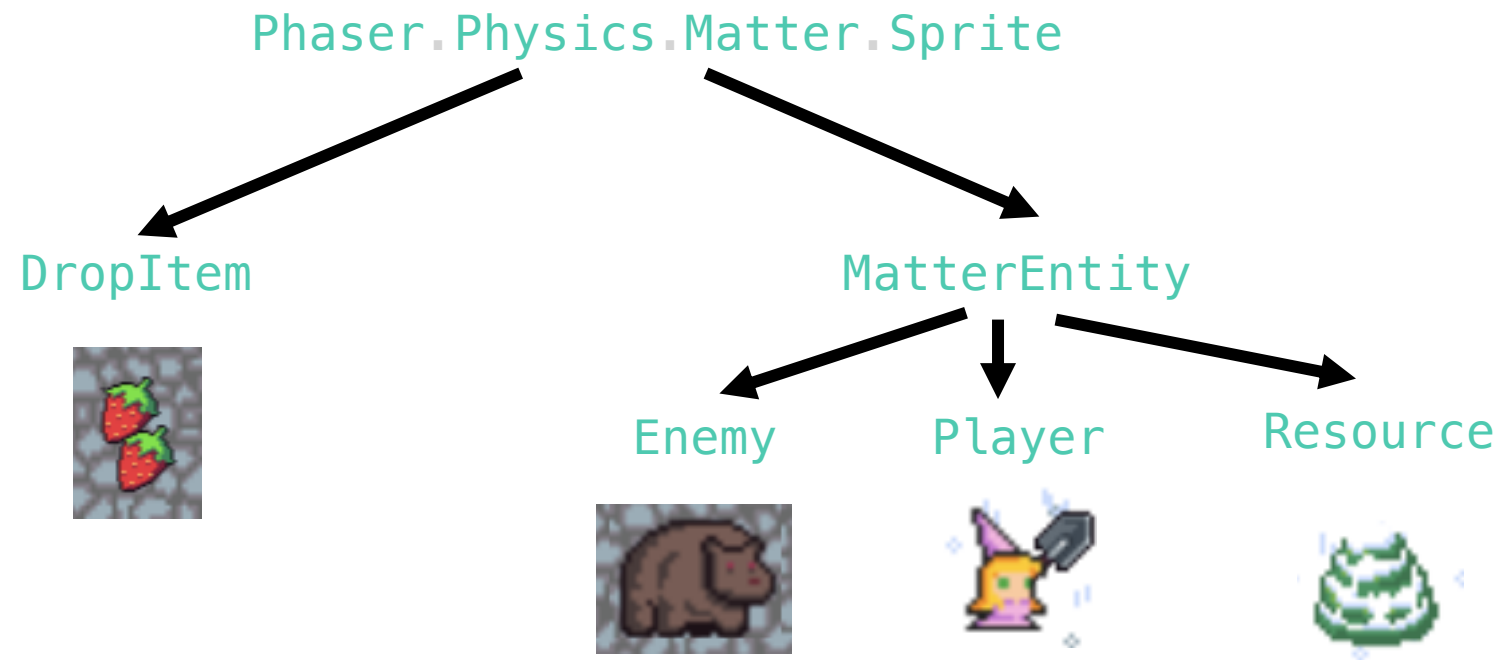
Tile



Name	bear
Type	
Visible	<input checked="" type="checkbox"/>
X	128.00
Y	160.00
Width	32.00
Height	32.00
Rotation	0.00
Flipping	
Horizontal	<input type="checkbox"/> False
Vertical	<input type="checkbox"/> False
Custom Properties	
drops	[241,280]
health	50

Custom Properties	
depth	1
drops	[273,273]
yOrigin	0.6

Inheritance Diagram



Mechanic: Idle & Walking Animation

- Select png with characters from <https://superdark.itch.io/encanted-forest-characters>
- Go to <http://gammafp.com/tool/atlas-packer/> and create atlas
- Then with that atlas, use <http://gammafp.com/tool/animator/> to create animation

```
import princessPng from '../assets/images/princess.png';  
import princessAtlas from '../assets/images/princess_atlas.json';  
import princessAnim from  
  '../assets/images/princess_anim.json';
```

```
static preload(scene) {  
  scene.load.atlas('princess',  
    princessPng, princessAtlas);  
  scene.load.animation('princess_anim',  
    princessAnim);  
}  
Update() {  
  if (Math.abs(this.velocity.x) > 0.1 ||  
    Math.abs(this.velocity.y) > 0.1) {  
    this.anims.play('princess_walk', true);  
  } else {  
    this.anims.play('princess_idle', true);  
  }  
}
```

Mechanic: chasing player within certain range

* install **phaser-matter-collision-plugin**

There's a sensor around the enemy. When the player enters within the range, it'll set the player as attacking target and start moving towards the direction of the player.

```
const { Body, Bodies } = Phaser.Physics.Matter.Matter;

const enemySensor = Bodies.circle(this.x, this.y, 80, {
  isSensor: true,
  label: 'enemySensor',
});

this.scene.matterCollision.addOnCollideStart({
  objectA: [enemySensor],
  callback: (other) => {
    if (other.gameObjectB.name === 'player'){
      this.attacking = other.gameObjectB;
    },
    context: this.scene,
  });
```



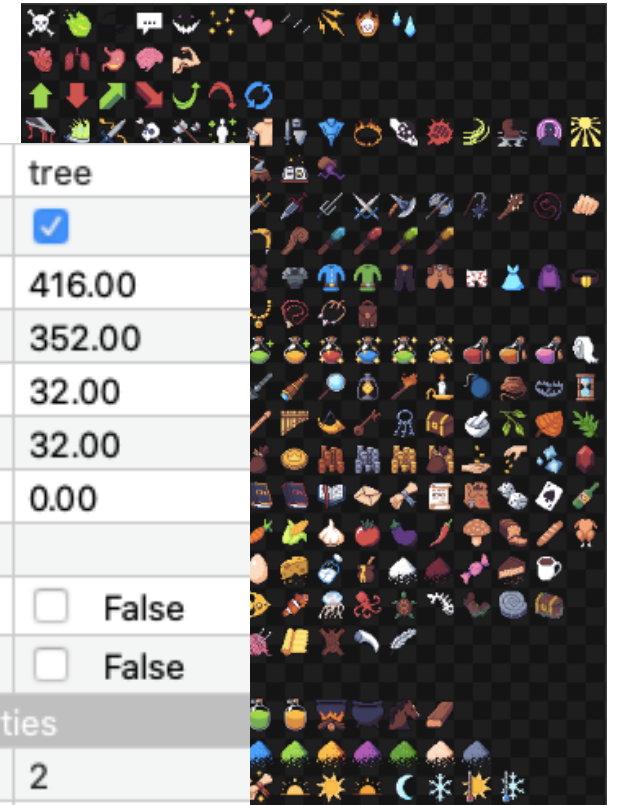
Mechanic: Drop and collect items

Each object has a custom properties of 'drops', which is an array with number that's connected to the items png. For example, 272 is the tree bark pic. The attribute can be parsed using

```
const drops = JSON.parse(
  resource.properties.find((p) => p.name === 'drops').value,
);
```

Then on dead, the object is removed and items are created.
On pickup, the items are destroyed and score is added.

Type	tree
Visible	<input checked="" type="checkbox"/>
X	416.00
Y	352.00
Width	32.00
Height	32.00
Rotation	0.00
Flipping	
Horizontal	<input type="checkbox"/> False
Vertical	<input type="checkbox"/> False
Custom Properties	
depth	2
drops	[272,272]
yOrigin	0.8



Mechanic: Player Attacking

- When the space key is down, the weapon is rotated. When the weapon is rotated above a certain angle, it triggers hit() method of the player
- the target's health decreases if there're objects within the player's sensor (blue circle)



Mechanic: Scoring System

- Post request to <https://us-central1-js-capstone-backend.cloudfunctions.net/api/games> with content of { "name": "lily adventure" } to get unique API key for the game
- Get request to /games/<key>/scores to score
- Post request to same route with body of {user, score} format to add score

```
const result = await fetch(
  'https://us-central1-js-capstone-backend.cloudfunctions.net/api/games/<key>/scores',
  {
    method: 'POST',
    headers: {
      Accept: 'application/json',
      'Content-Type': 'application/json',
    },
    body: JSON.stringify({
      user: name,
      score,
    }),
  },
);
```

Bugs faced

Bugs	Solved By
webpack on handling static assets	Reformat imports statement
Jest testing along with static assets	Configure Jest in package.json
Deployment nodeJS app to heroku	Add Procfile, server.js.
'this' keyword under class	Added transform-class-properties plugin to babel
Unexpected token ESLint error	Added babel-eslint

Explain what were your initial objectives (at the end of day 2) of the project and which ones did you (or not) achieve and why

- Initial objective: fart man

Fart man

Choose your fart:

<https://www.youtube.com/watch?v=ngALAdD3nkw>

https://www.youtube.com/watch?v=W_FRPoJlrll

<https://www.youtube.com/watch?v=12iwkJWdGs8>

<https://www.youtube.com/watch?v=0GgUnrLHapo>

https://www.youtube.com/watch?v=EI0_Cs6JoWM

https://www.youtube.com/watch?v=0nf_0Thk_4Q

light fart: <https://www.youtube.com/watch?v=dO7gB5ATJr8>

light fart 2: https://www.youtube.com/watch?v=EI0_Cs6JoWM

how bout sneeze man

sneeze sound:

https://www.youtube.com/watch?v=fR2_9nBPdXs

<https://www.youtube.com/watch?v=k0eOj72dCCU>

<https://www.youtube.com/watch?v=EC9XKrB1gSU>

woman: <https://www.youtube.com/watch?v=rhCV3-7-Cao>

<https://www.youtube.com/watch?v=9gpCsHfw5FE>

<https://www.youtube.com/watch?v=fccTY2Ytgb4>

<https://www.youtube.com/watch?v=SLs2iWCCqaA>

<https://www.youtube.com/watch?v=502IdezvBJY>

<https://www.youtube.com/watch?v=v5Q1IPhHP0Q>

Appendix

- Configuring Jest: <https://jestjs.io/docs/en/configuration.html>
- How to Deploy Phaser Game to Heroku: <https://medium.com/@diegoreyes1212/how-to-deploy-phaser-3-node-js-express-webpack-game-to-heroku-tutorial-8a813f31502c>
- Creating Phaser Template: <https://phasertutorials.com/creating-a-phaser-3-template-part-1/>
- Creating a survival game using PhaserJS: <https://www.udemy.com/course/create-a-survival-game-in-javascript-with-phaser-3-in-2020/>
- 16 x 16 Enchanted Forest Characters: <https://superdark.itch.io/enchanted-forest-characters>
- Sound Effects: <https://freesound.org/>
- Natural Tilesets: <https://stealthix.itch.io/rpg-nature-tileset?download>
- Atlas packer & Animation tool: <http://gammafp.com/tools/>
- Scoring API: <https://www.notion.so/Leaderboard-API-service-24c0c3c116974ac49488d4eb0267ade3>
- JS Capstone Rubrics: <https://www.notion.so/microverse/RPG-game-f94a617841e240a293c0b6928beebe89>
- Transform-class-plugin: <https://babeljs.io/docs/en/babel-plugin-transform-class-properties/>
- Fix Eslint unexpected token error: <https://stackoverflow.com/questions/53072225/how-can-i-fix-eslint-parsing-error-for-unexpected-token>