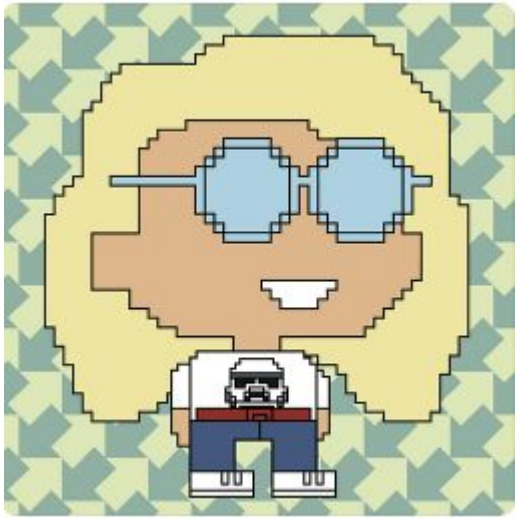
ROCK

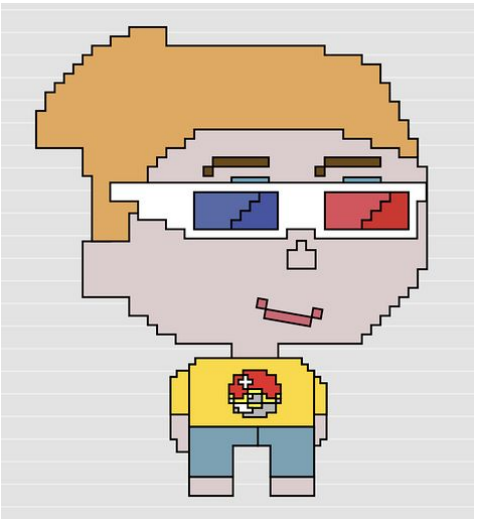
Jermaine

PAPER



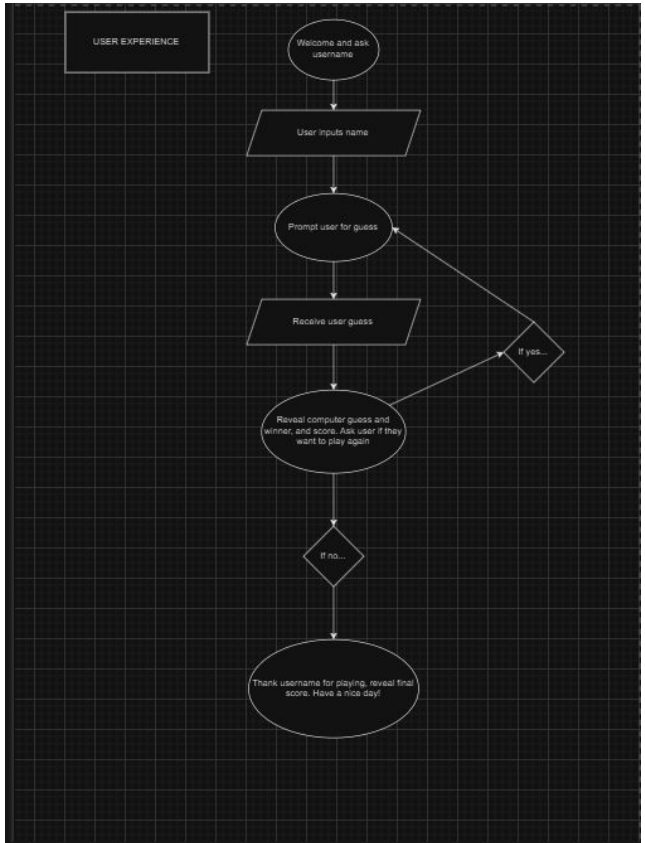
Luke

SCISSORS

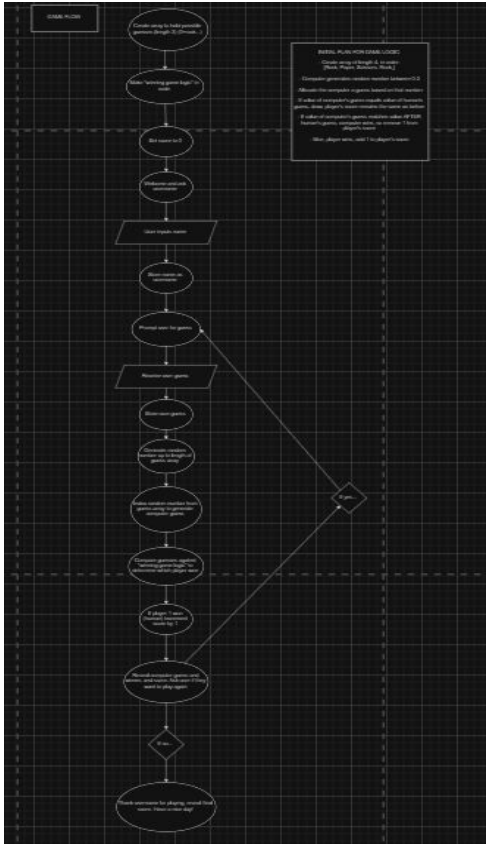


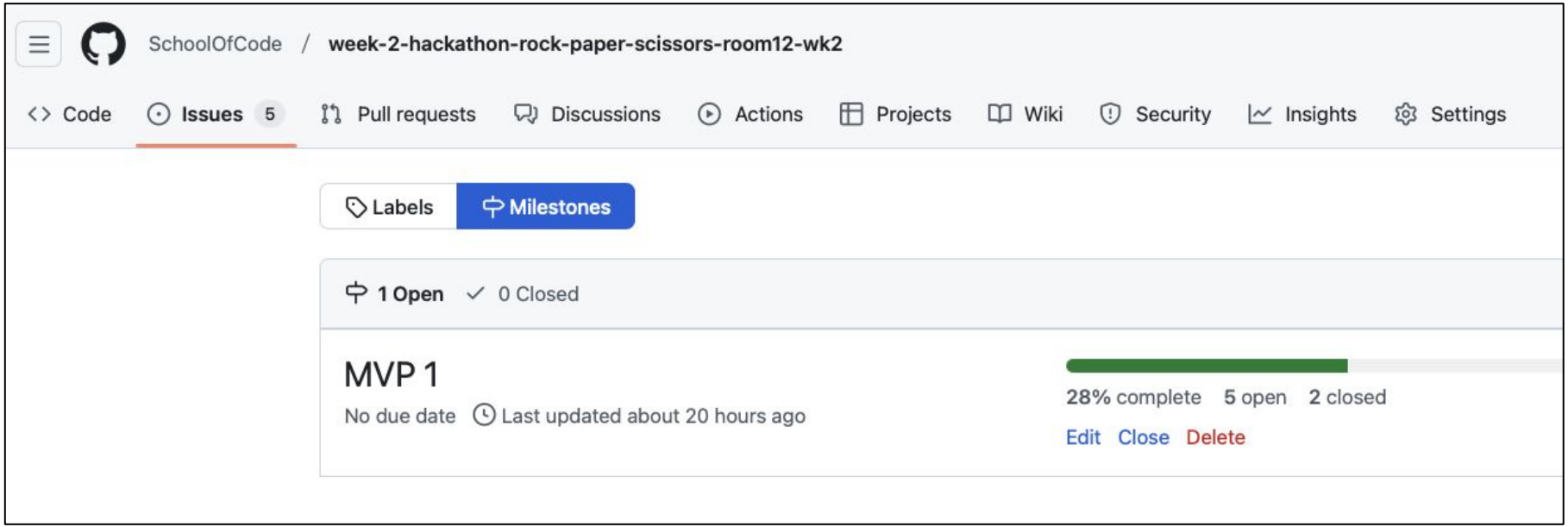
Liz

User experience flowchart



“Under the hood” flowchart




SchoolOfCode / week-2-hackathon-rock-paper-scissors-room12-wk2
Code
Issues 5
Pull requests
Discussions
Actions
Projects
Wiki
Security
Insights
Settings
Labels
Milestones
1 Open
0 Closed
MVP 1
No due date
Last updated about 20 hours ago
28% complete
5 open
2 closed
Edit
Close
Delete

Our plan for the game logic

Our plan for the game logic

```
["rock", "paper", "scissors", "rock"]
```

Our plan for the game logic

If we repeat the first element at the end, then each element beats the previous.

So if you have the *i+1*th element vs opponent's *i*th, you've won.

```
["rock", "paper", "scissors", "rock"]
```

Our plan for the game logic

If we repeat the first element at the end, then each element beats the previous.

So if you have the *i+1*th element vs opponent's *i*th, you've won.

```
["rock", "paper", "scissors", "rock"]
```

Range for setting computer guess.
Don't let it pick the last element!

The bit of code
that made us feel like this

```
function getResult(playerMove, computerMove){
    if(playerMove == computerMove) {
        return 0 ;
    }
    else if (moveList.indexOf(computerMove) == (moveList.indexOf(playerMove) + 1 )
        return -1 ;
    }
    else {
        return 1 ;
    }
```

```
["rock", "paper", "scissors", "rock"]
```

```
function getResult(playerMove, computerMove){
    if(playerMove == computerMove) {
        return 0 ;
    }
    else if (moveList.indexOf(computerMove) == (moveList.indexOf(playerMove) + 1 )
        return -1 ;
    }
    else {
        return 1 ;
    }
```

```
["rock", "paper", "scissors", "rock"]
```

Player

```
function getResult(playerMove, computerMove){
    if(playerMove == computerMove) {
        return 0 ;
    }
    else if (moveList.indexOf(computerMove) == (moveList.indexOf(playerMove) + 1 )
        return -1 ;
    }
    else {
        return 1 ;
    }
```

```
["rock", "paper", "scissors", "rock"]
```

Player Computer

```
function getResult(playerMove, computerMove){
    if(playerMove == computerMove) {
        return 0 ;
    }
    else if (moveList.indexOf(computerMove) == (moveList.indexOf(playerMove) + 1 )
        return -1 ;
    }
    else {
        return 1 ;
    }
```

```
["rock", "paper", "scissors", "rock"]
```

Player Computer

1 2

```
function getResult(playerMove, computerMove){
    if(playerMove == computerMove) {
        return 0 ;
    }
    else if (moveList.indexOf(computerMove) == (moveList.indexOf(playerMove) + 1 )
        return -1 ;
    }
    else {
        return 1 ;
    }
```

```
["rock", "paper", "scissors", "rock"]
```

Player **Computer**

1 +1 == 2 ?

```
function getResult(playerMove, computerMove){
    if(playerMove == computerMove) {
        return 0 ;
    }
    else if (moveList.indexOf(computerMove) == (moveList.indexOf(playerMove) + 1 )
        return -1 ;
    }
    else {
        return 1 ;
    }
```

```
["rock", "paper", "scissors", "rock"]
```

Player Computer

1 +1 == 2 ?

True, so you lose

Player	Computer	Expected	
Rock	Rock	Draw	
Rock	Paper	Lose	
Rock	Scissors	Win	
Paper	Rock	Win	
Paper	Paper	Draw	
Paper	Scissors	Lose	
Scissors	Rock	Lose	
Scissors	Paper	Win	
Scissors	Scissors	Draw	

```
function getResult(playerMove, computerMove){
    if(playerMove == computerMove) {
        return 0 ;
    }
    else if (moveList.indexOf(computerMove) == (moveList.indexOf(playerMove) + 1 )
        return -1 ;
    }
    else {
        return 1 ;
    }
```

```
["rock", "paper", "scissors", "rock"]
```

Computer

0

Player

2

```
function getResult(playerMove, computerMove){
    if(playerMove == computerMove) {
        return 0 ;
    }
    else if (moveList.indexOf(computerMove) == (moveList.indexOf(playerMove) + 1 )
        return -1 ;
    }
    else {
        return 1 ;
    }
```

```
["rock", "paper", "scissors", "rock"]
```

Computer **Player**

0 == 2 +1 ?

If only we could make

3 == 0

```
function getResult(playerMove, computerMove){
    if(playerMove == computerMove) {
        return 0 ;
    }
    else if (moveList.indexOf(computerMove) == (moveList.indexOf(playerMove) + 1 ) % (moveList.length - 1)) {
        return -1 ;
    }
    else {
        return 1 ;
    }
```

Our logic made it quite simple to implement the extended version of the game

STEP 1: Add elements to array

```
["rock", "paper", "scissors",
"spock","lizard", "rock" ]
```

STEP 2: Add one new losing condition

```
(moveList.indexOf(computerMove) ==
(moveList.indexOf(playerMove) + 3 )
% (moveList.length - 1))
```

When computer is	When player is	Expected outcome for player	Test passed?
Rock	Rock	Draw	
Rock	Paper	Win	
Rock	Scissors	Loss	
Rock	Lizard	Loss	
Rock	Spock	Win	
Paper	Rock	Loss	
Paper	Paper	Draw	
Paper	Scissors	Win	
Paper	Lizard	Win	
Paper	Spock	Loss	
Scissors	Rock	Win	
Scissors	Paper	Loss	
Scissors	Scissors	Draw	
Scissors	Lizard	Loss	
Scissors	Spock	Win	
Lizard	Rock	Win	
Lizard	Paper	Loss	
Lizard	Scissors	Win	
Lizard	Lizard	Draw	
Lizard	Spock	Loss	
Spock	Rock	Loss	
Spock	Paper	Win	
Spock	Scissors	Loss	
Spock	Lizard	Win	
Spock	Spock	Draw	

Are you ready to play?

Things we've learned

- Some more methods of javascript arrays
  - Eg .at(-1) for accessing last element, indexOf()for getting the first available key back, given the value
  - To generate the random the number we found the below method.
  - let randomNumber = Math.floor(Math.random() * 3);
  - console.log(randomNumber);
- It's a balancing act between the quick code and the best code
  - It's important to get something that works up and running, but it's also really nice to write code you can extend
- How to keep an eye on our "overplayed strengths"
  - Liz has a tendency to "often take the initiative", so on Day 2 she consciously stepped back a little
  - Jermaine made sure that he wasn't overpowering.
  - Luke often gets very tunnel visioned on a problem! On day 1, he made sure that he regularly checked what he was doing, and worked with his team

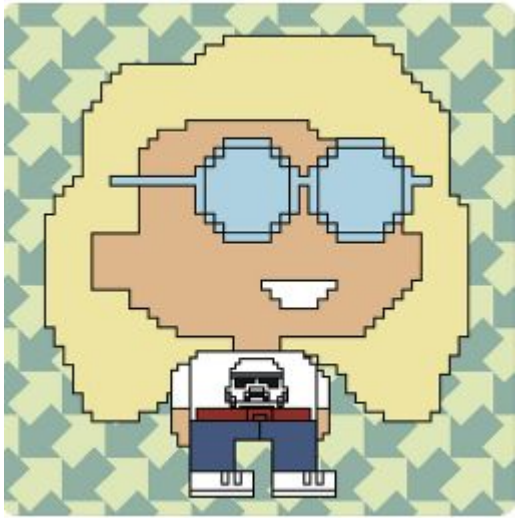
If we had more time...

- An array of verbs so that we could display messages “Spock vaporizes Rock!” or “Lizard poisons Spock”
- Make a game for two human players
- If we had another week, adding functionality for a player to input their own extra choices (Dinosaur, fighter jet, etc...), and automatically making those changes to the code to make them work in the game

ROCK

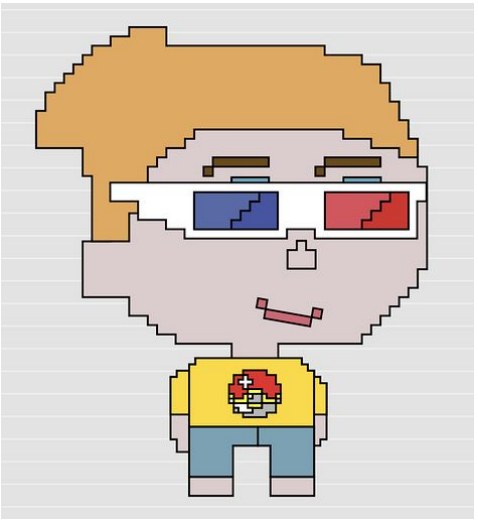
Jermaine

PAPER



Luke

SCISSORS



Liz