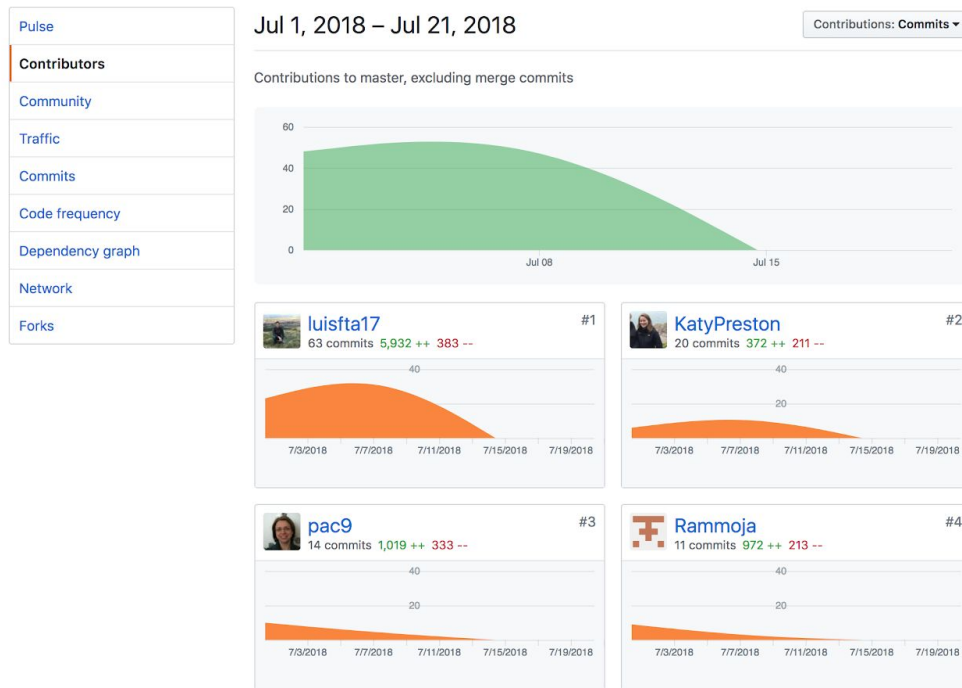


## Evidence for Project Unit

Luis Farid Tejero Aoun E-21

### P. 1 Github Contributors page



### P. 2 Project Brief

#### Educational App

The BBC are looking to improve their online offering of educational content by developing some interactive apps that display information in a fun and interesting way. Your task is to make an MVP to put forward to them - this may only be for a small set of information, and may only showcase some of the features to be included in the final app. You might use an API to bring in content or a database to store facts.

The topic of the app is your choice, but here are some suggestions you could look into:

- Interactive timeline, e.g. of the history of computer programming
- Explore the Solar System - navigate through planets and display information
- Interactive map of a historical event - e.g. World War 1, the travels of Christopher Columbus

#### MVP

- Display some information about a particular topic in an interesting way
- Have some interactivity that enables a user to move through different sections of content

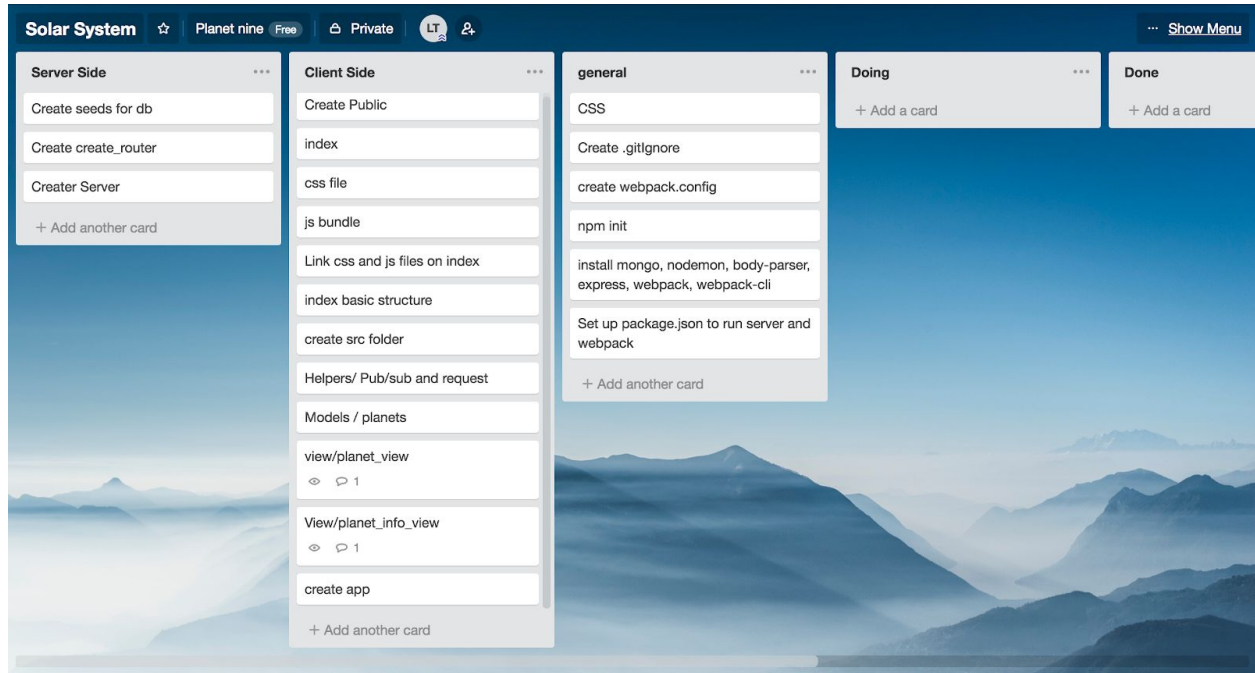
#### Examples of further features

- Bring in data using an API or create your own
- Use charts or maps to display your information

#### API, Libraries, Resources

- <https://www.highcharts.com/> HighCharts is an open-source library for rendering responsive charts.
- <https://leafletjs.com/> Leaflet is an open-source library for rendering maps and map functionality.

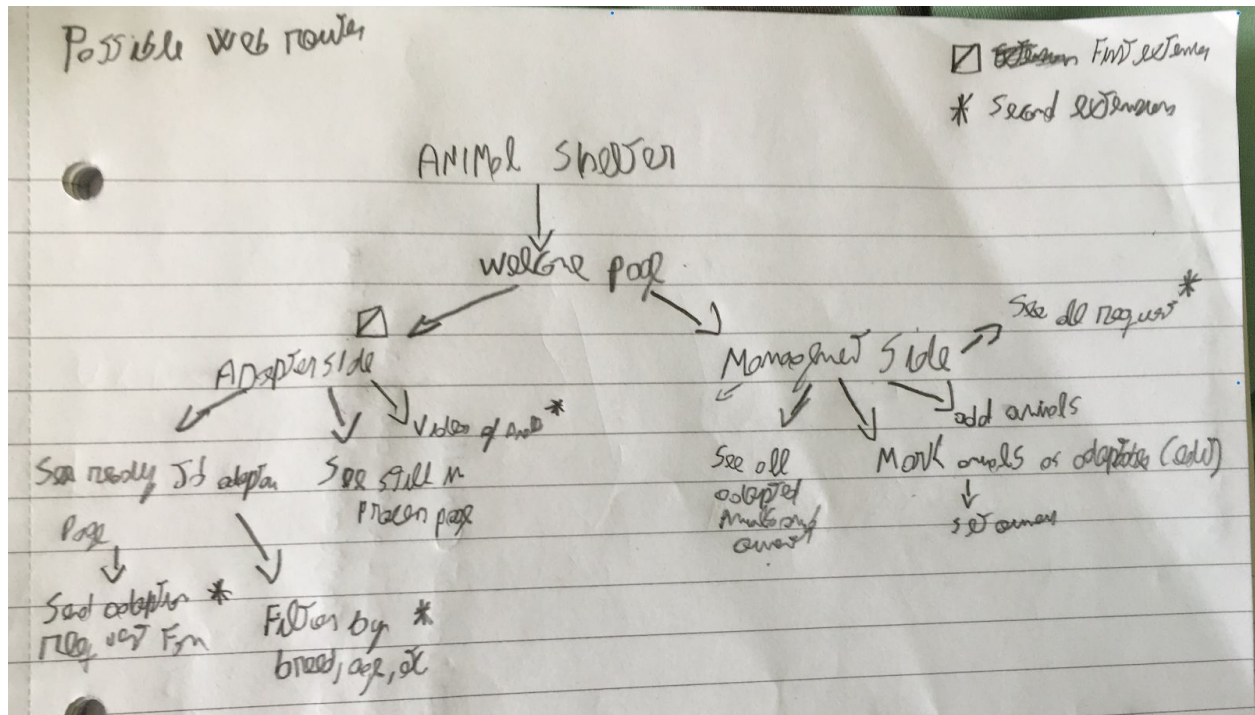
### P. 3 Use of Trello



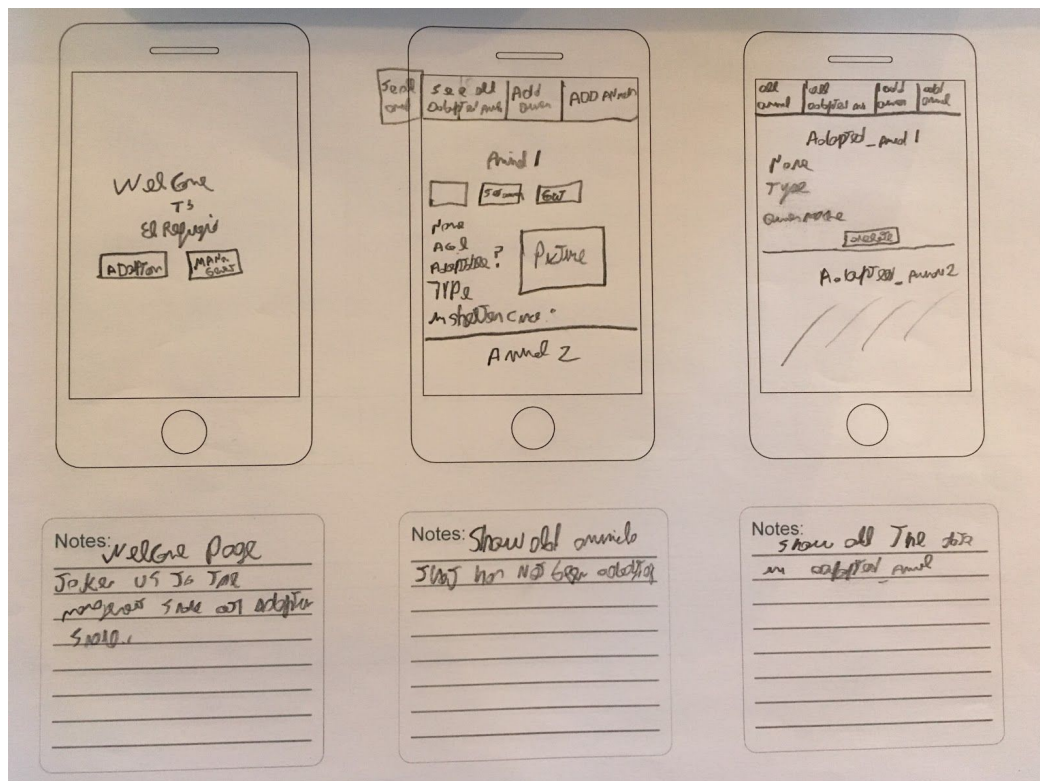
### P. 4 Acceptance Criteria

Acceptance Criteria	Expected outcome	Pass/Fail
Be able to see a list of planets	See a list in the dropdown	Pass
Be able to see the information for each planet	When more info button is clicked, more information is displayed	Pass
Be able to track the ISS	When ISS link clicked, see a map with its location changing in real time	Pass
Be able to navigate back to current planet from the more info page of that planet	When click on back button on more info page, navigate back to current planet in list	Pass

## P. 5 User sitemap

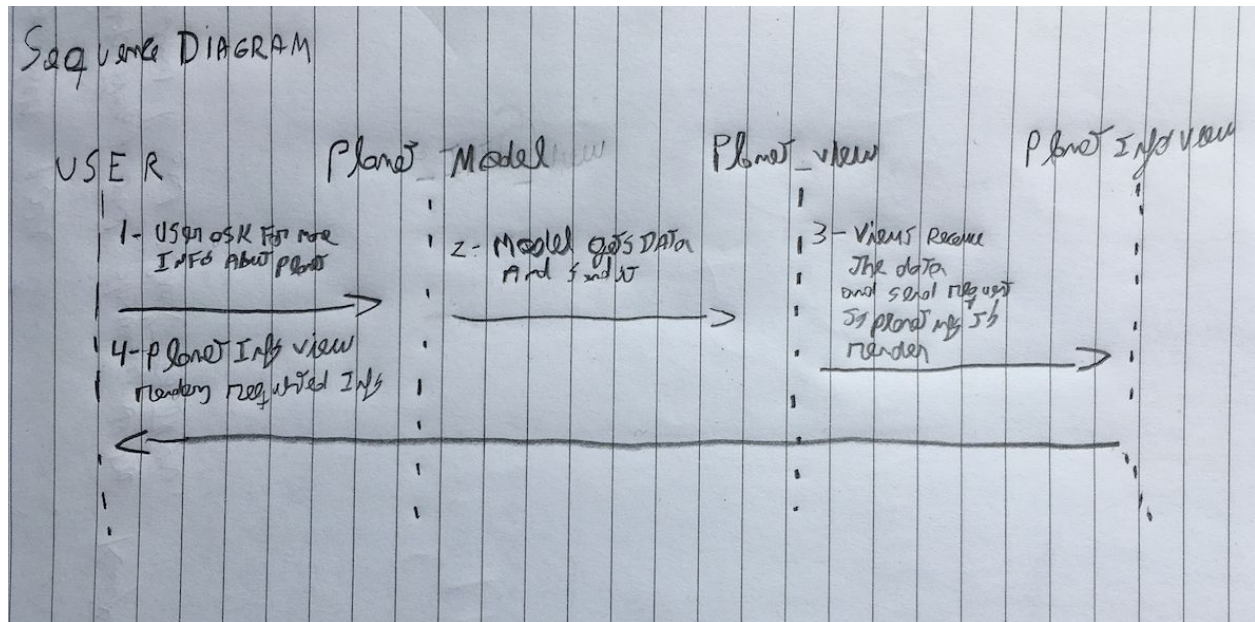


## P. 6 Wireframes designs

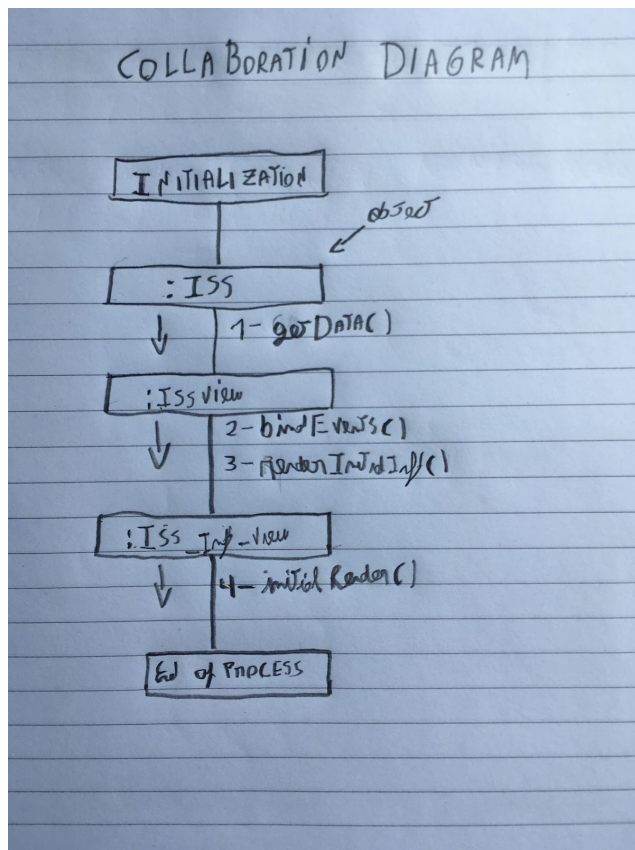


## P. 7 System interactions diagrams

### Sequence Diagram

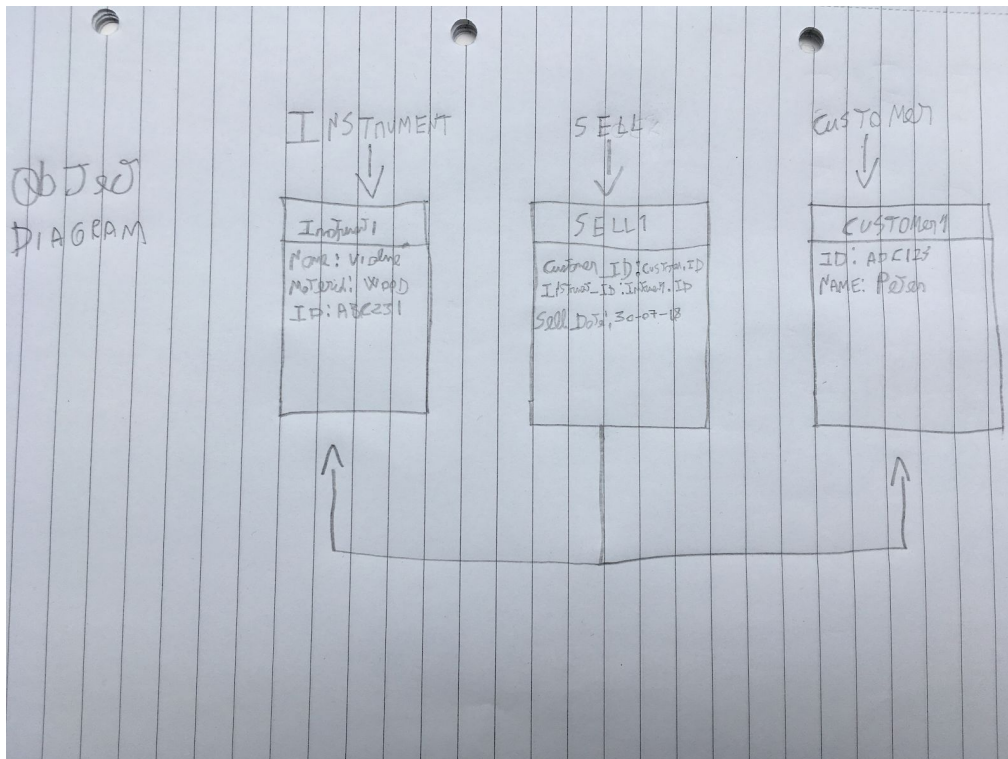
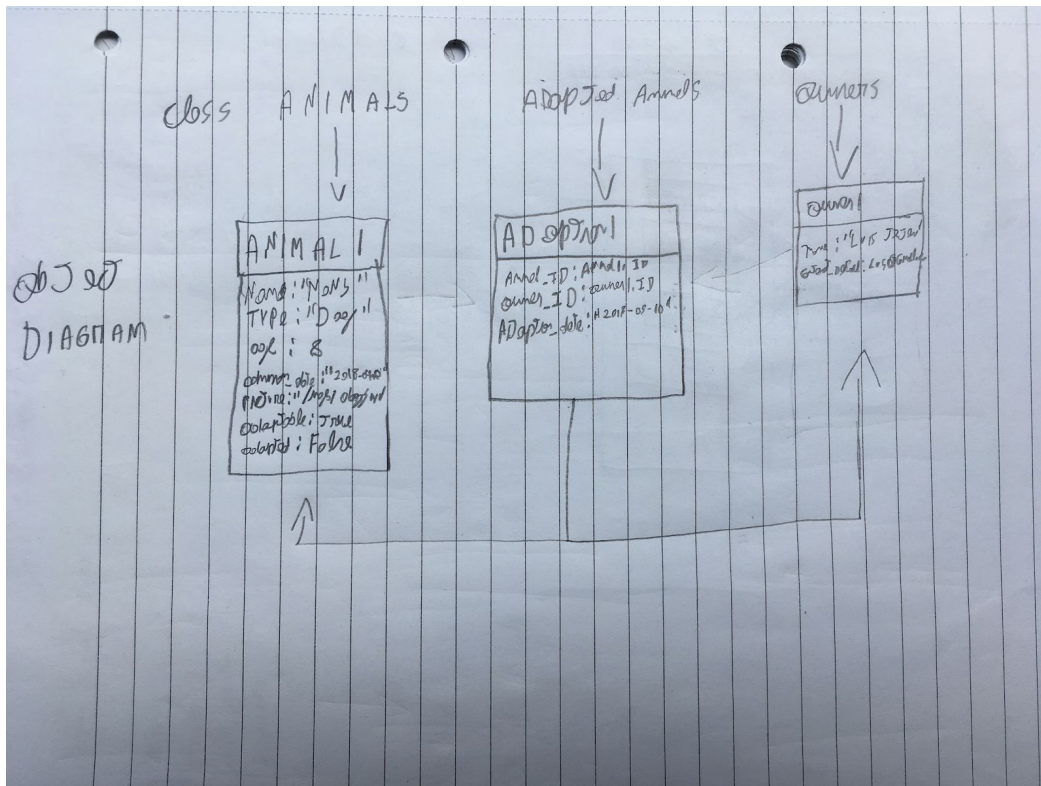


### Collaboration Diagram





# P. 8 Two Object Diagrams (ADD corrected one as well)



**P. 9 Choice of two algorithms (find the algorithms on a program you might have written, show the code you have used. )**

```
public void recvDamage(int damage){  
    if (damage >= this.defenseFormula()){  
        int total = damage - this.defenseFormula();  
        this.hp -= total;  
        if (!this.isAlive()){  
            this.hp = 0;  
        }  
    }  
}
```

This algorithm called `recvDamage` will first check if the amount of damage is greater than the defense formula of the character, if that is true then it will calculate the total of damage that the character will receive, in this case it will be, damage that has been passed as an argument minus the amount of defense points of the characters, then it will reduce the amount of life (hp) of the character by the total. The the algorithm will check if the character is still alive, if is not, it will set it's hp (life) to zero.

```
public void collectTreasure(Treasure treasure) {  
    for (Item item : treasure.getItems()) {  
        this.addItem(item);  
    }  
    treasure.removeAllItemsFromTreasure();  
}
```

The `collectTreasure` algorithm will receive a `Treasure` as an argument, then for each item inside of the treasure it will call the `addItem` function that is going to add that item to the inventory of the Character. Then the algorithm will call the function `removeAllItemsFromTreasure` to remove all items from the array List of `Treasure`.

## P. 10 Example of Pseudocode

```

95
96   def adopted_by(owner)
97     #Check if the animal is adoptable
98     #Modify and update new animal
99     #create hash with the new data
100    #create the new object
101    #save new object in DB
102  end


```

**P. 11 Github link to one of your projects**




<https://github.com/luisfta17/Combat>

[←](#)
[→](#)
[🔍](#)
[🌟](#)
[🔔](#)

[GitHub, Inc. \[US\]](#)
<https://github.com/luisfta17/Combat>



[Pull requests](#)
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Your repository details have been saved.

[luisfta17 / Combat](#)

👁 Watch 0

★ Unstar 1

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[📁 Pull requests 0](#)
[📁 Projects 0](#)
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Combat is an Android game app, made in Java for my second Project in CodeCln. This project made use of Java, Abstract Classes, TDD. No frameworks were allowed so no Game Engine or similar.
 <https://play.google.com/store/apps/details?id=com.luisfta17.combat>

Add topics

📦 76 commits

🌿 1 branch

📦 0 releases

👤 1 contributor


Branch: master
New pull request

Create new file

Upload files

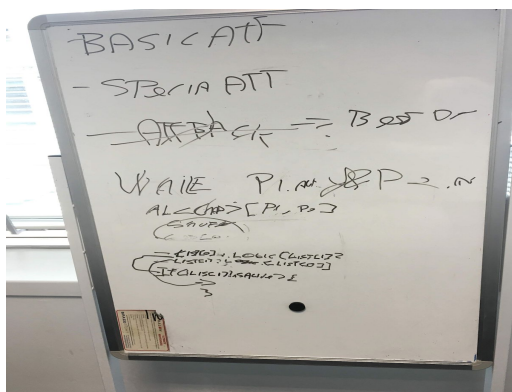
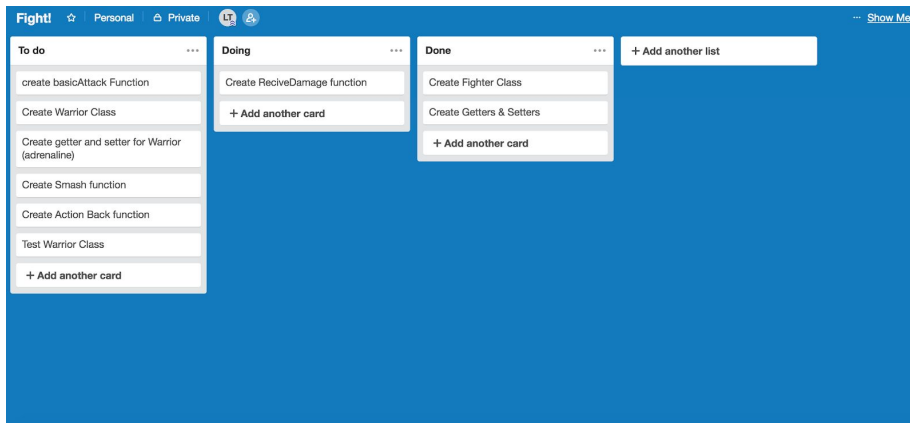
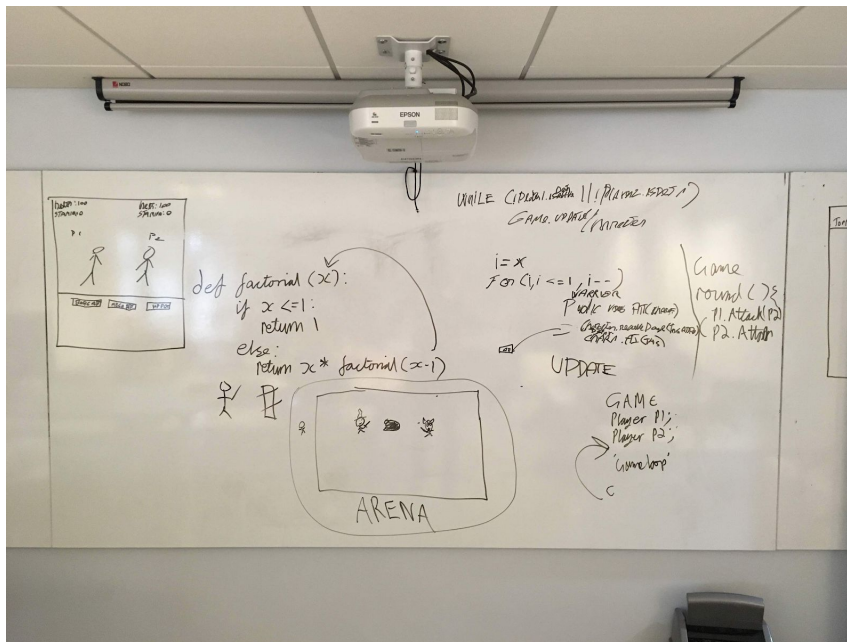
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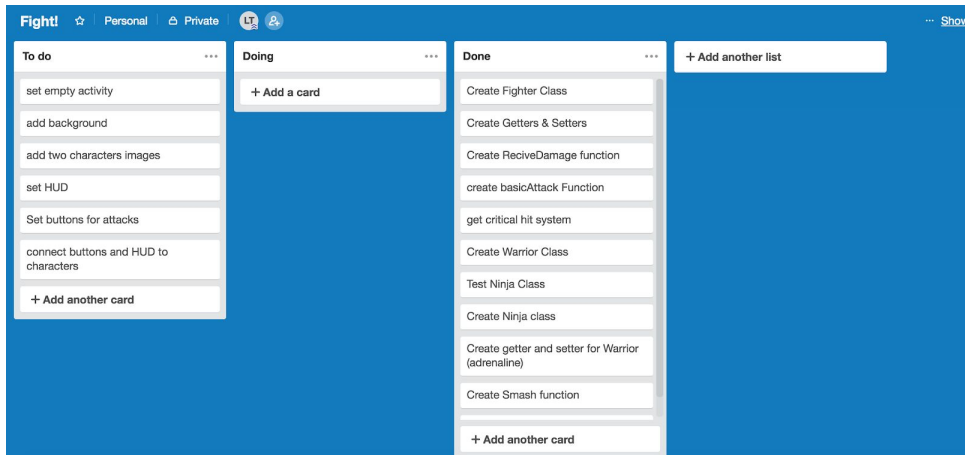
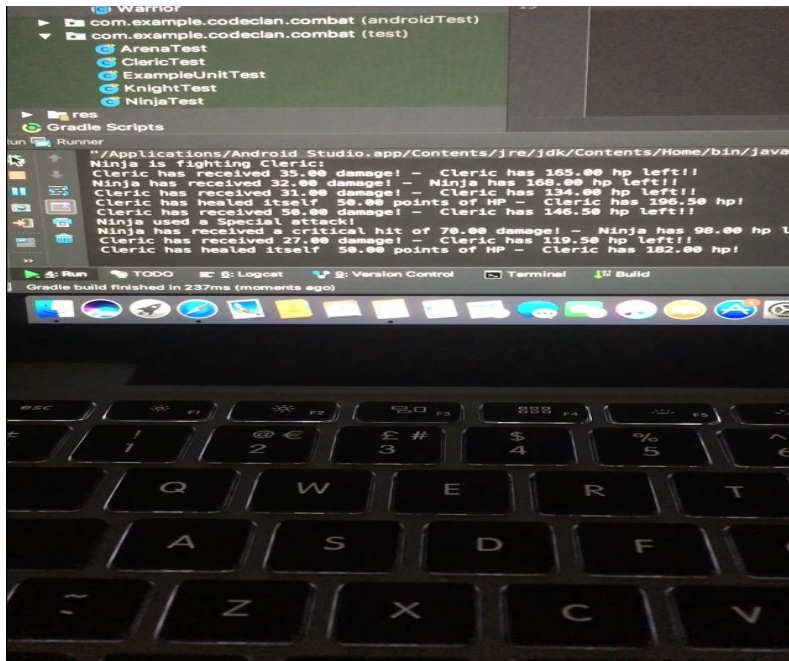

luisfta17 improved HUD
Latest commit 01ba441 2 days ago

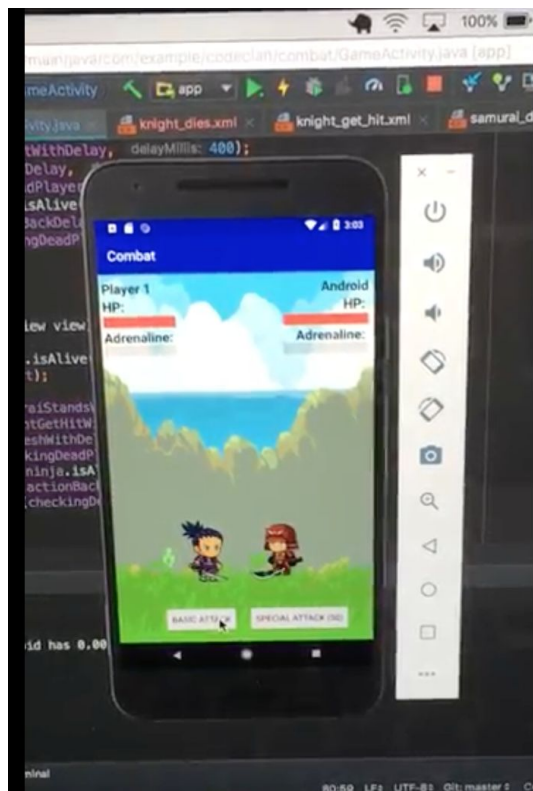
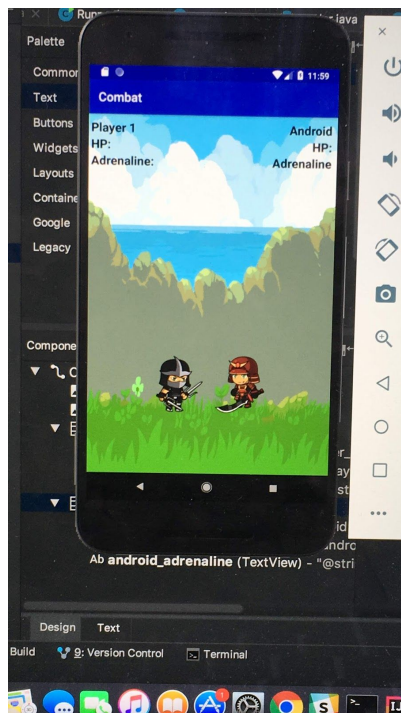
📁 .idea	activity game 2 added	4 days ago
📁 app	improved HUD	2 days ago
📁 gradle/wrapper	Initial commit	8 days ago
📁 release	Apk added	3 days ago
📁 .gitignore	Initial commit	8 days ago
📄 Combat Game.pdf	Brief added	3 days ago
📄 build.gradle	Initial commit	8 days ago
📄 gradle.properties	Initial commit	8 days ago
📄 gradlew	Initial commit	8 days ago
📄 gradlew.bat	Initial commit	8 days ago
📄 settings.gradle	Initial commit	8 days ago

**P. 12 Screenshot of your planning and the different stages of development to show changes.**









## P. 13 User input

El Refugio ❤️   All our Animals   Check all owners   Check all the adopted animals   Register an Animal   Register an Owner   See all requests

Name:

Select a type of animal:

Age:

Admission date:

Add picture Link:

Is this animal ready for adoption?


Register new Animal

## Input being added:

El Refugio ❤️   All our Animals   Check all owners   Check all the adopted animals   Register an Animal   Register an Owner   See all requests

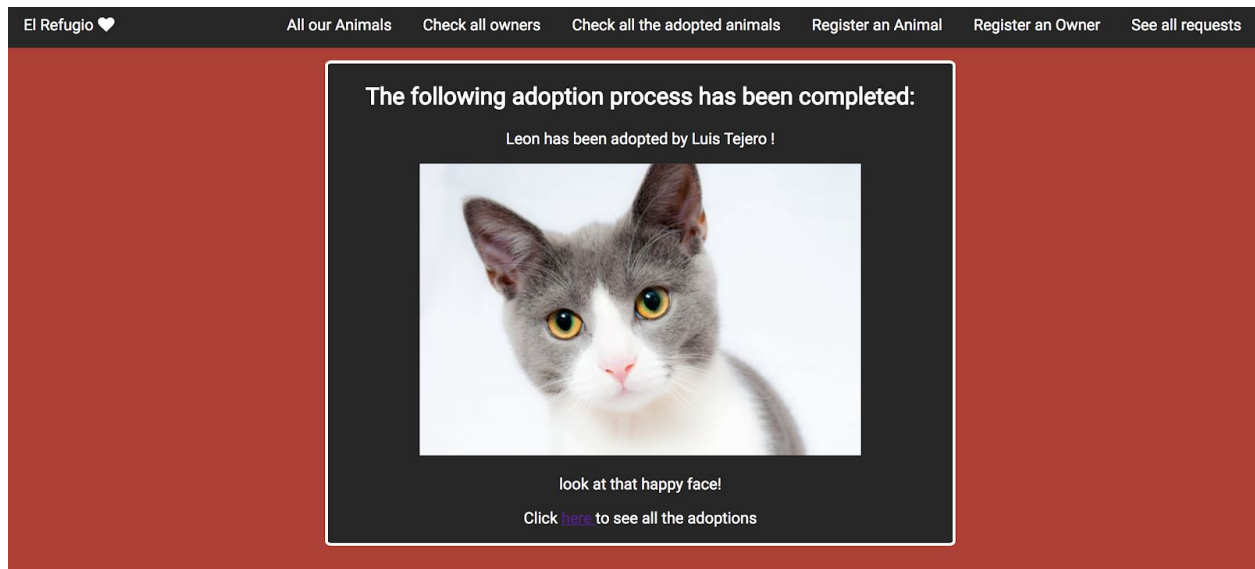
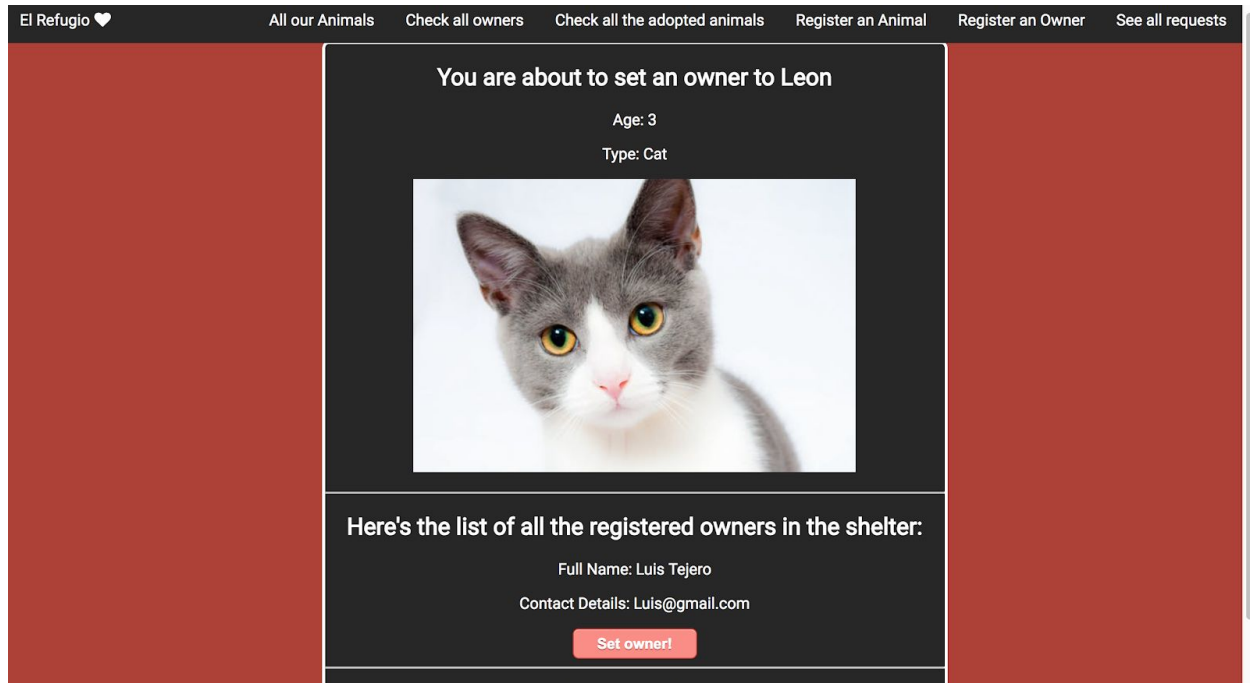
This animal has been registered, hopefully we will find a new home for Leon soon!

Age: 3  
Type: Cat



Leon have been in El Refugio since 2018-05-16

## P. 14 Interaction with data persistence





## P. 15 User output result

El Refugio ❤️


All our AnimalsCheck all ownersCheck all the adopted animalsRegister an AnimalRegister an OwnerSee all requests

Hello there! Here you will find all the animals that are in the shelter

Find animals by: Deer Not adoptable yet Find See All Animals

Name: Bambi

Type: Deer



Age: 1

Bambi has been in El Refugio since 2018-04-10

Bambi is not ready for adoption yet!

Edit

Delete

Set animal as adoptable

**P. 16 Show an API being used within your program:**

```
1  const RequestHelper = function (url) {
2    this.url = url
3  }
4
5  RequestHelper.prototype.get = function () {
6    return fetch(this.url)
7      .then(response => response.json());
8  }
9
10
11  module.exports = RequestHelper;
12
```

```
1  const Characters = require('./models/characters.js');
2  const CharactersView = require('./views/characters_view.js');
3
4  document.addEventListener('DOMContentLoaded', () => {
5    const dropDown = document.querySelector('#houses');
6    const characterInfo = document.querySelector('#characters');
7    const characters = new Characters('https://api.got.show/api/characters/');
8    characters.getData();
9    characters.bindEvents();
10   const characterView = new CharactersView(characterInfo, dropDown);
11   characterView.bindEvents();
12 })
13
```

```
CharacterInfo.prototype.setName = function (character) {
  const characterName = document.createElement('h4');
  characterName.textContent = character.name;
  this.element.appendChild(characterName);
};

CharacterInfo.prototype.setImage = function (character) {
  if (character.imageLink) {
    const link = character.imageLink;
    const characterImage = document.createElement('img');
    characterImage.src = `https://api.got.show${link}`;
    this.element.appendChild(characterImage);
  }
};

CharacterInfo.prototype.setTitles = function (character) {
  if (character.titles.length != 0) {
    const titles = document.createElement('p');
    titles.textContent = "Titles ";
    this.element.appendChild(titles);
    const titleList = document.createElement("ul");
    for (title of character.titles) {
      const titlename = document.createElement("li");
      titlename.textContent = title;
      titleList.appendChild(titlename);
      this.element.appendChild(titleList);
    }
  }
};
```

# Game Of Thrones Wiki

## Select a House

✓

House Hightower

House Frey

House Osgrey

House Marbrand

House Swyft

House Blackfyre

House Velaryon

House Targaryen

House Bracken

House Costayne

House Estermont

House Arryn

House Penrose

Night's Watch

House Greyjoy

Faith of the Seven

House Wynch

Chataya's brothel

House Royce of the Gates of the Moon

House Stark

Band of Nine

House Staedmon

House Torrent

House Florent

House Oakheart

House Norcross

City Watch of King's Landing

House Thorne

House Seaworth

## Select a House

House Targaryen

## Aegon I Targaryen



## Aegon II Targaryen



## P. 17 Testing your program

### Bug Tracking Report

			Pass/Fail
Scroll of ISS map	Failed	Difficulty in identifying between zooming in on map and scrolling down screen as both use same motion movement on mac. Restricted the zoom in capability of map so that can scroll down page easier.	Passed
Next/previous button to navigate to between planet.	Failed	Previous button was going below 0. Changed logic $v \leq 0$ to prevent going below zero.	Passed
Tracker position of ISS through a popup	Failed	Popup was not clearing when ISS moved therefore had a trail of popups. Resolved by .....	Passed
Next/previous button to navigate to between planet.	Failed	Button wasn't always loading next planet as to get next planet a number was being added to a string, ie rather than result being planet 2 in the array, the program was adding '1' + 1 giving a string of '11'. Resolved by parse string to integer.	Passed
API keys to be ignored to prevent uploaded to GitHub	Failed	Set up js file to only hold the key and put js file into gitignore. All team members had to set up the files which were ignored locally on their computer.	Passed



## P. 18 Demonstrating testing in the program

### Test failing, Showing class file and test file.

```
testing_task_2.rb  card.rb  testing_tas...  Static_&D...  card.rb
2  # Carry out dynamic testing on
3  * the code below.
4  * Correct the errors below
5  * that you spotted in task 1.
6  require_relative('card.rb')
7  class CardGame
8  def checkforace(card)
9    if card.value = 1
10     return true
11    else
12     return false
13    end
14  end
15
16 def highest_card(card1 card2)
17   if card1.value >
18     card2.value
19     return card1.suit
20   else
21     card2.suit
22   end
23 end
24
25 def self.cards_total(cards)
26   total = 0
27   for card in cards
28     total += card.value
29   end
30   return "You have a total
31   of" + total
32 end
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34 end
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```

## Test File done

```
1 require("minitest/autorun")
2 require("minitest/rg")
3 require_relative("../testing_task_2")
4
5 class CardTest < MiniTest::Test
6   def setup
7     @card1 = Card.new("ace", 1)
8     @card2 = Card.new("hearts", 10)
9     @card3 = Card.new("spades", 7)
10    @card4 = Card.new("joker", 0)
11    @game1 = CardGame.new
12  end
13
14  def test_check_for_ace__true
15    assert_equal(true, @game1.check_for_ace(@card1))
16  end
17
18  def test_check_for_ace__false
19    assert_equal(false, @game1.check_for_ace(@card2))
20  end
21
22  def test_check_for_ace__false2
23    assert_equal(false, @game1.check_for_ace(@card3))
24  end
25
26  def test_highest_card__hearts
27    assert_equal("hearts", @game1.highest_card(@card1, @card2))
28  end
29
30  def test_highest_card__spades
31    assert_equal("spades", @game1.highest_card(@card1, @card3))
32  end
33
34  def test_highest_card__ace
35    assert_equal("ace", @game1.highest_card(@card4, @card1))
36  end
37
38
39  def test_cards_total__18
40    assert_equal("You have a total of 18", CardGame.cards_total([@card1, @card2, @card3]))
41  end
42
43  def test_cards_total__17
44    assert_equal("You have a total of 17", CardGame.cards_total([@card2, @card3]))
45  end
46
47  def test_cards_total__1
48    assert_equal("You have a total of 1", CardGame.cards_total([@card1]))
49  end
50 end
51
```

## Class file done

```
1  ### Testing task 2 code:
2
3  # Carry out dynamic testing on the code below.
4  # Correct the errors below that you spotted in task 1.
5  require_relative('card.rb')
6  class CardGame
7
8      def check_for_ace(card)
9          if card.value == 1
10             return true
11          else
12             return false
13          end
14      end
15
16      def highest_card(card1, card2)
17          if card1.value > card2.value
18             return card1.suit
19          else
20             card2.suit
21          end
22      end
23
24      def self.cards_total(cards)
25          total = 0
26          for card in cards
27             total += card.value
28          end
29          return "You have a total of #{total}"
30      end
31
32  end
33
```

**Test passing.**

```
[→ PDA_Static_and_Dynamic_Task_A ruby specs/testing_task_2_spec.rb  
Run options: --seed 25463
```

```
# Running:
```

```
.....
```

```
Finished in 0.001206s, 7462.6866 runs/s, 7462.6866 assertions/s.
```

```
9 runs, 9 assertions, 0 failures, 0 errors, 0 skips
```

```
→ PDA_Static_and_Dynamic_Task_A █
```