Evidence for Project Unit

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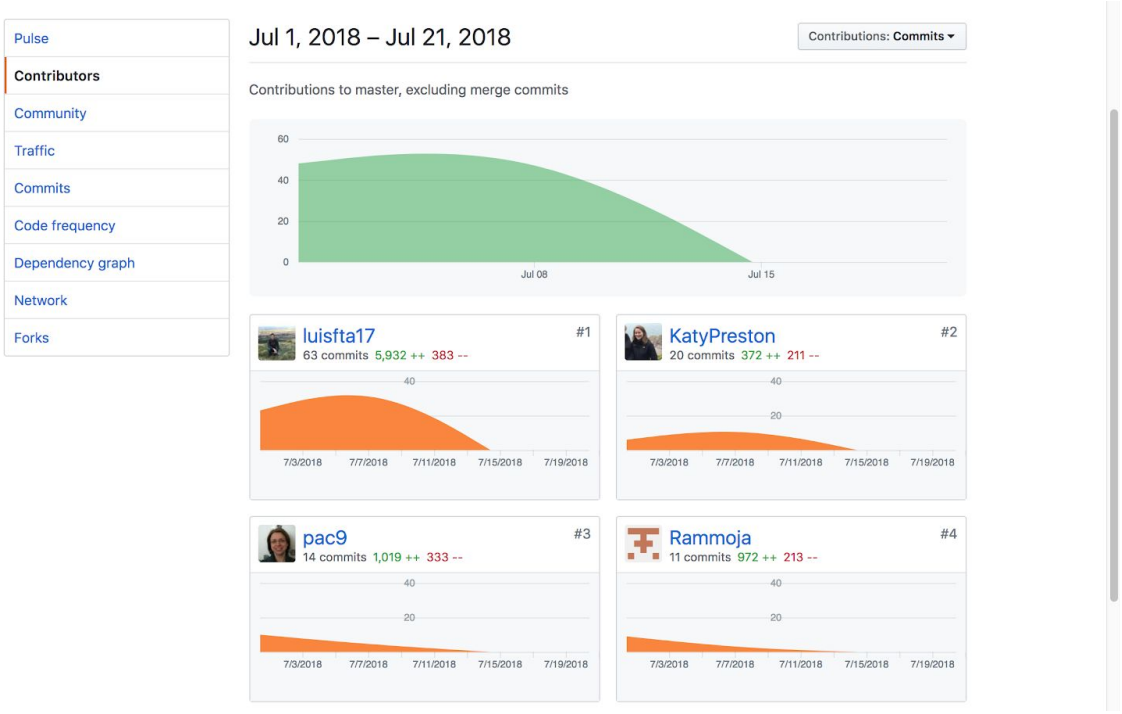
P. 1 Github Contributors page



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

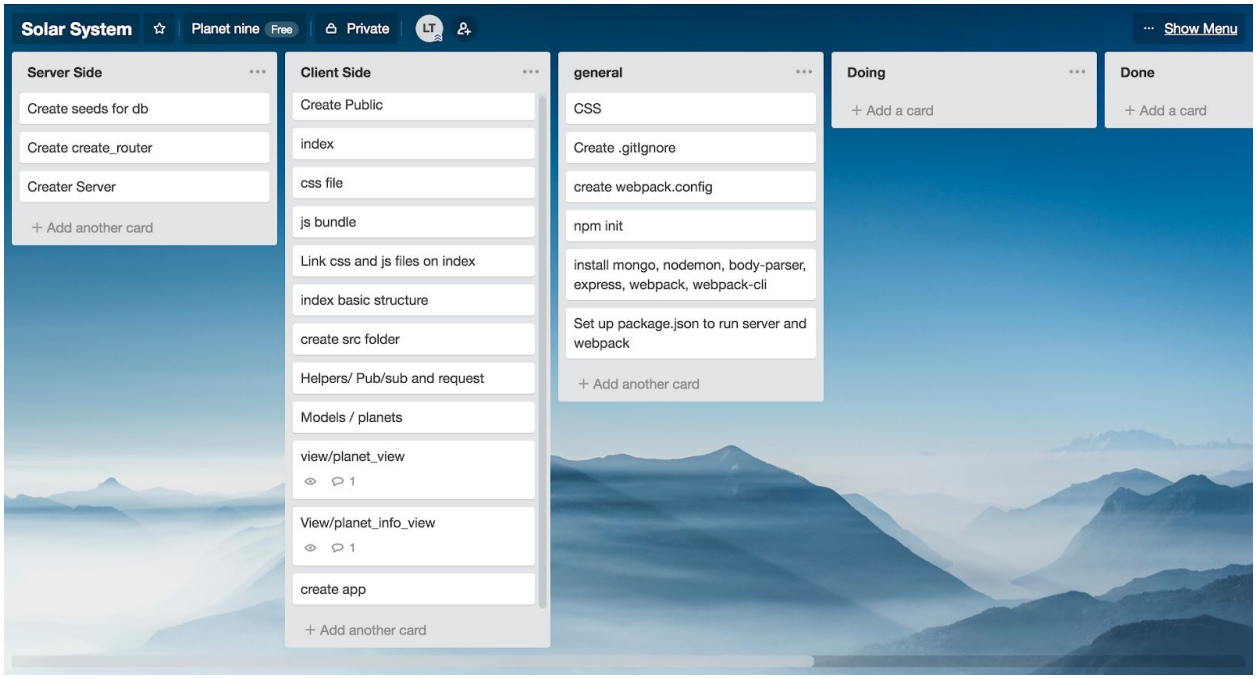
Examples of further features

- 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.

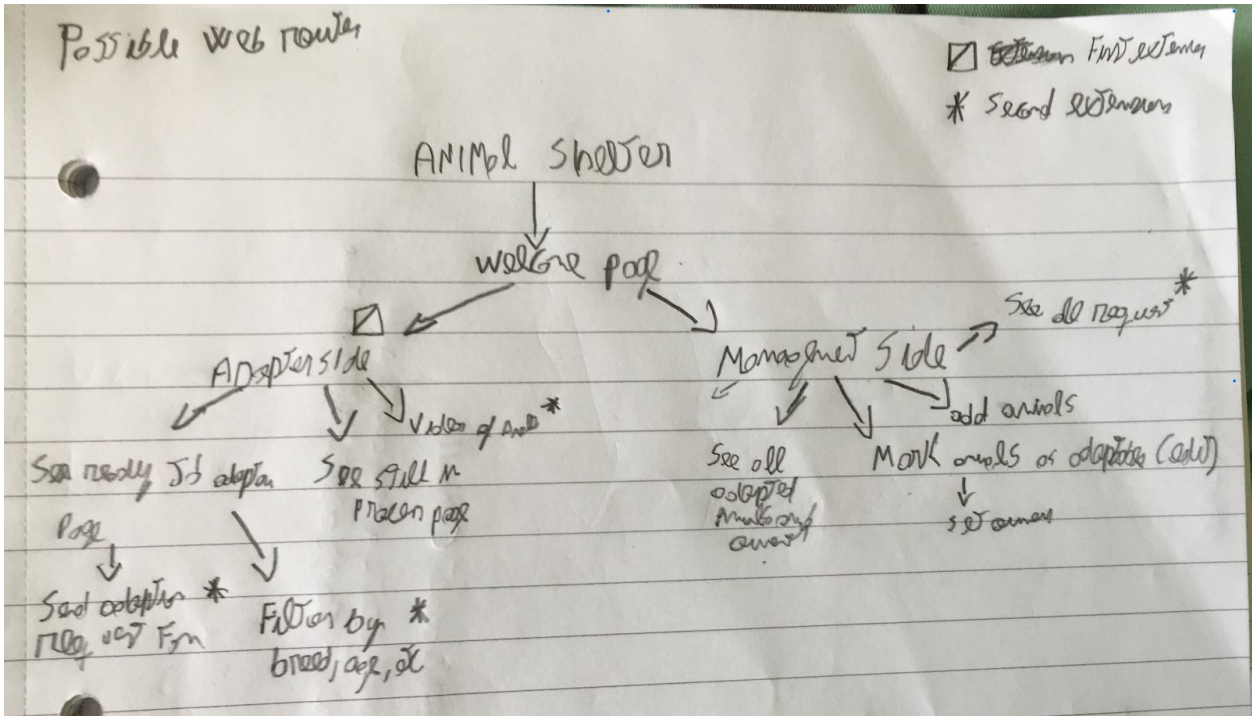
P. 3 Use of Trello



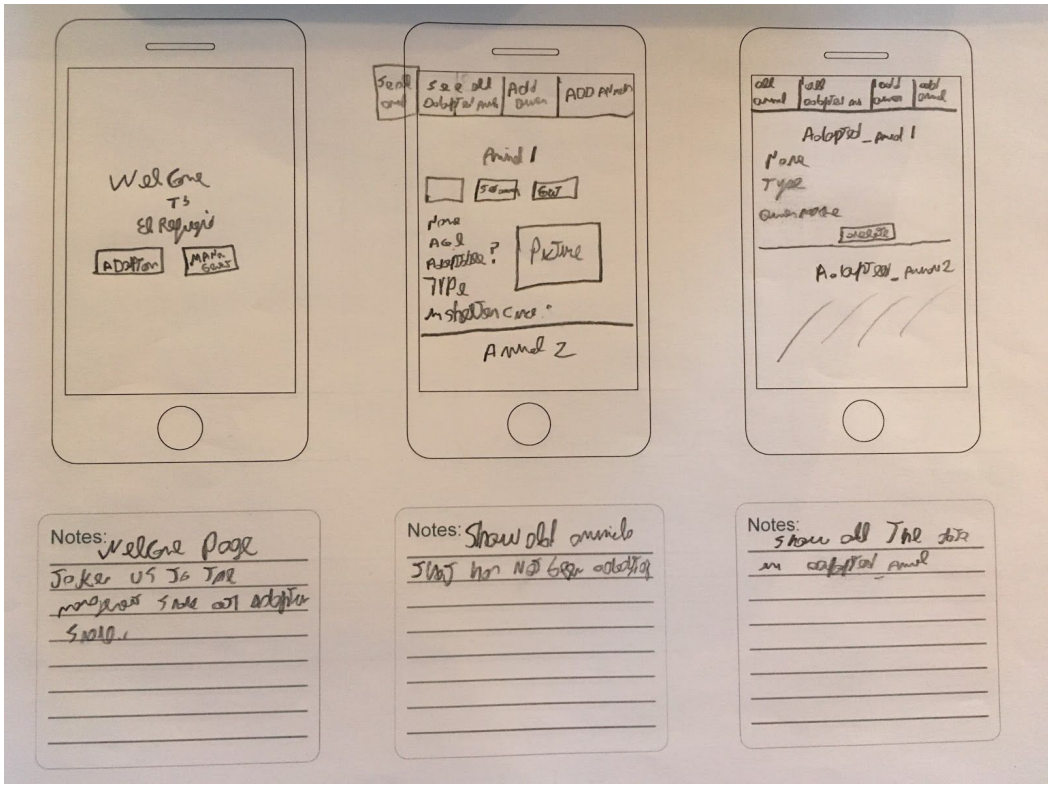
P. 4 Acceptance Criteria

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

P. 5 User sitemap

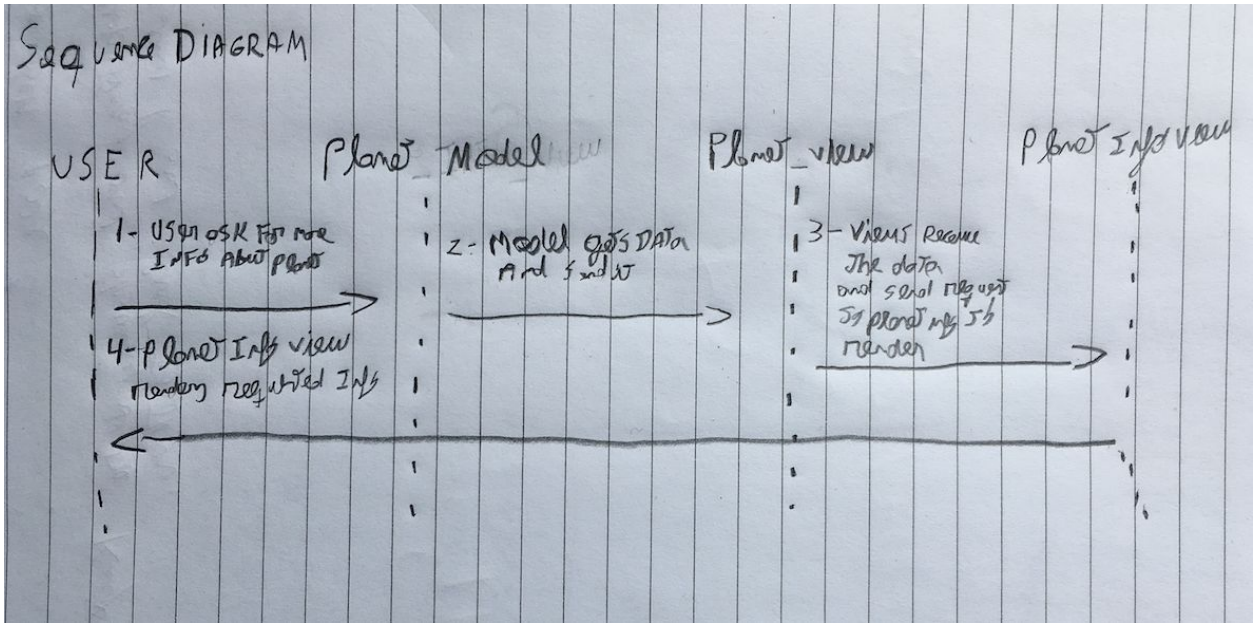


P. 6 Wireframes designs

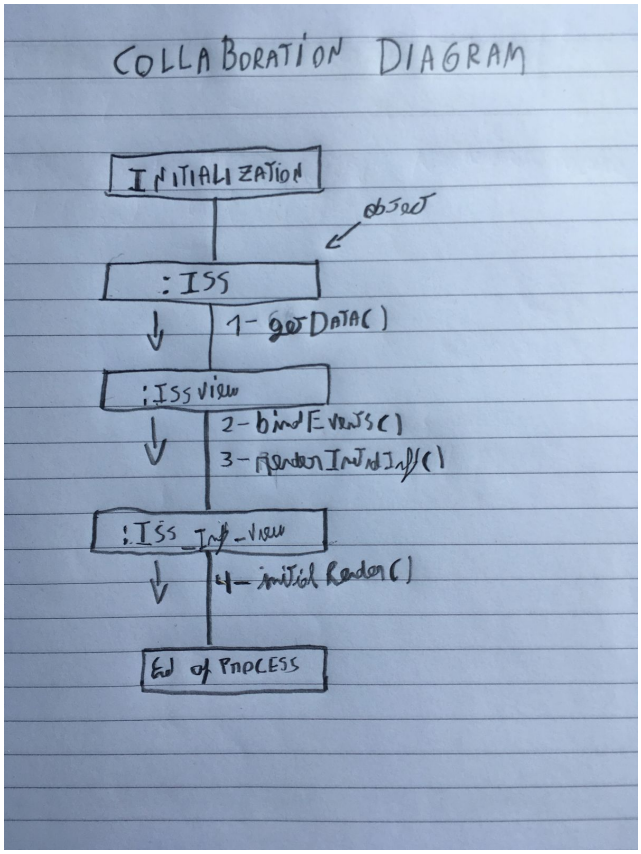


P. 7 System interactions diagrams

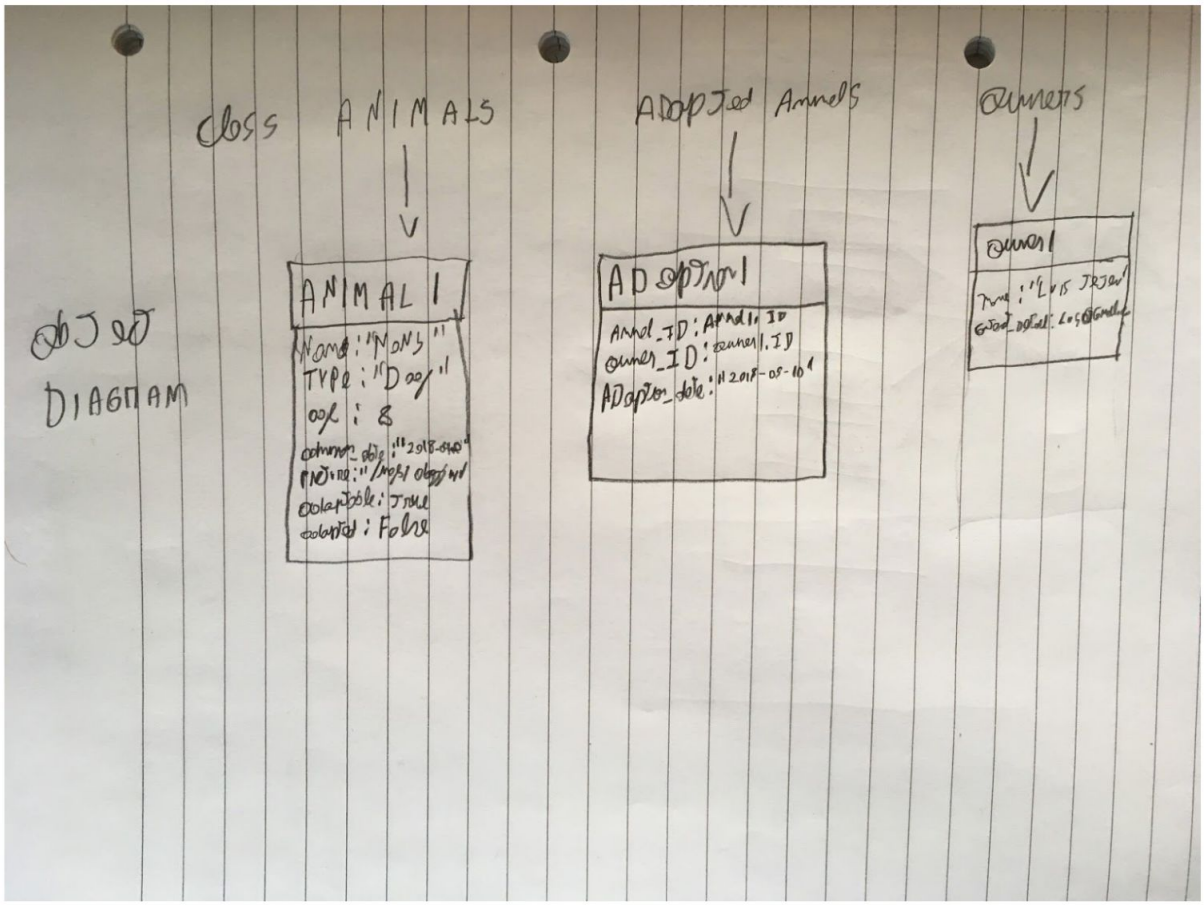
Sequence Diagram



Collaboration Diagram



P. 8 Two Object Diagrams



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

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


}
```

This algorithm called reciveDamage 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();
}
```

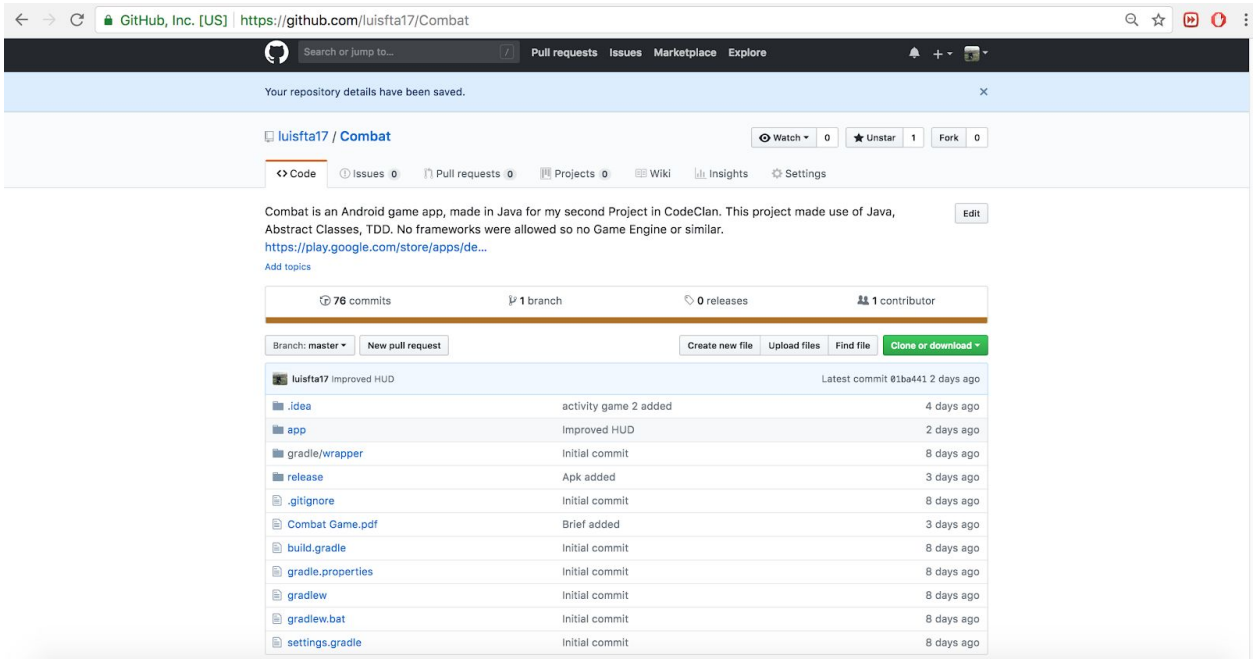
The collectTreasure algorithm will receive a Treasure as an argument, then for each item inside of the treasure it will call the addItem function that is going to add that item to the inventory of the Character. Then the algorithm will call the function removeAllItemsFromTreasure to remove all items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

P. 10 Example of Pseudocode

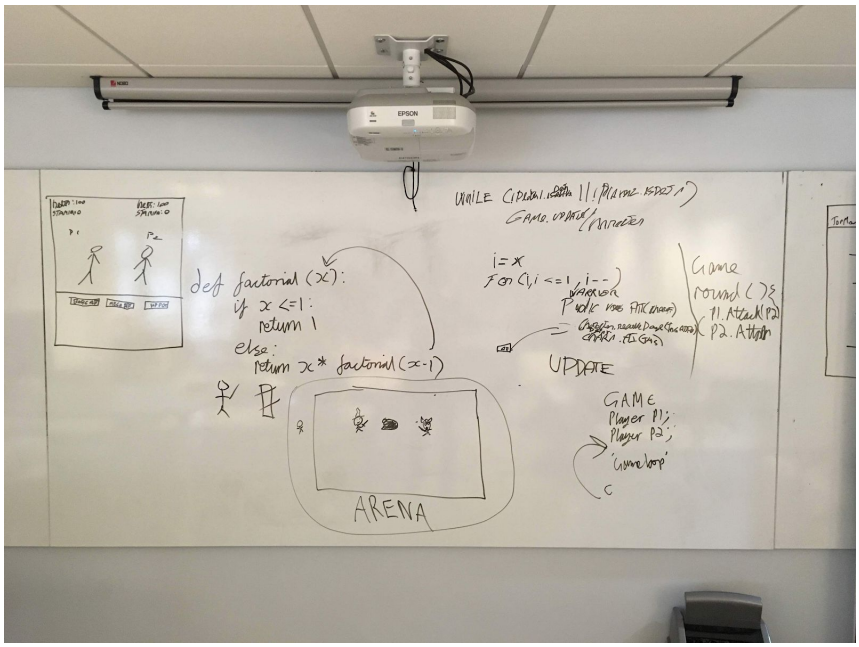
```
95
96  def adopted_by(owner)
97    #Check if the animal is adoptable
98    #Modify and update new animal
99    #create hash with the new data
100   #create the new object
101   #save new object in DB
102 end
```

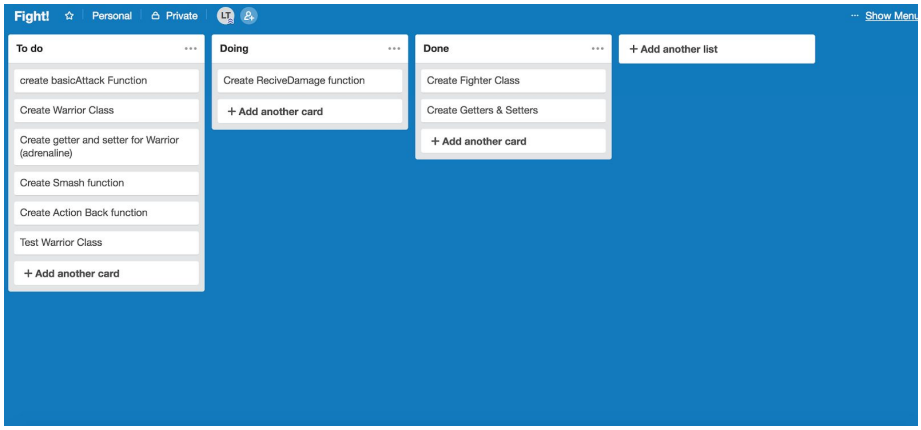
P. 11 Github link to one of your projects

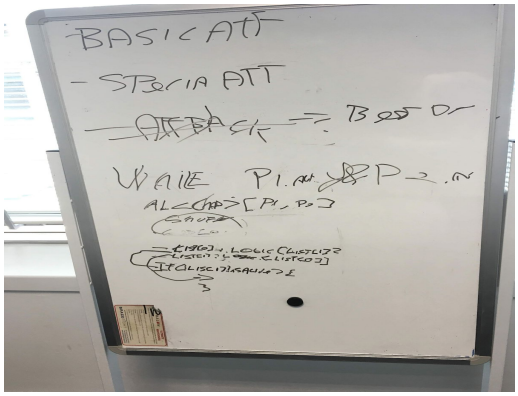
https://github.com/luisfta17/Combat

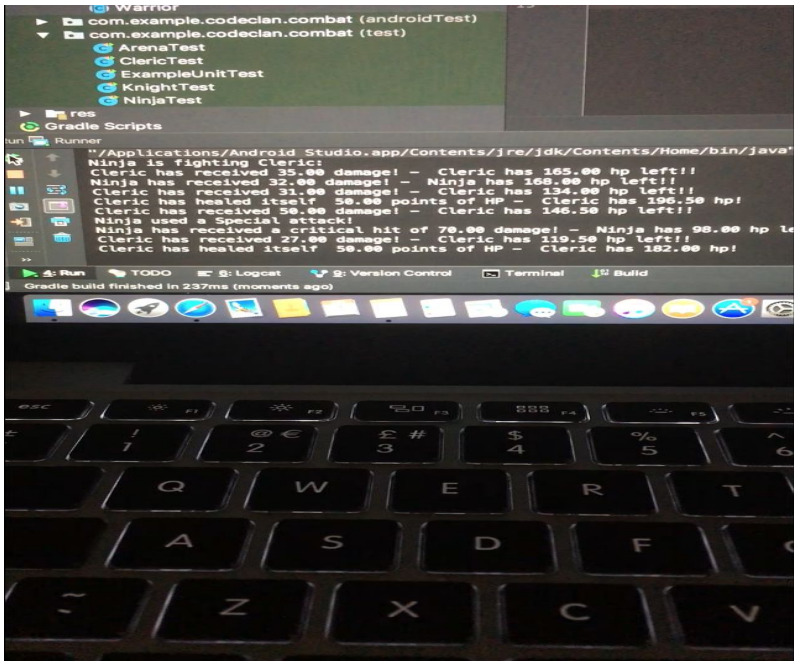


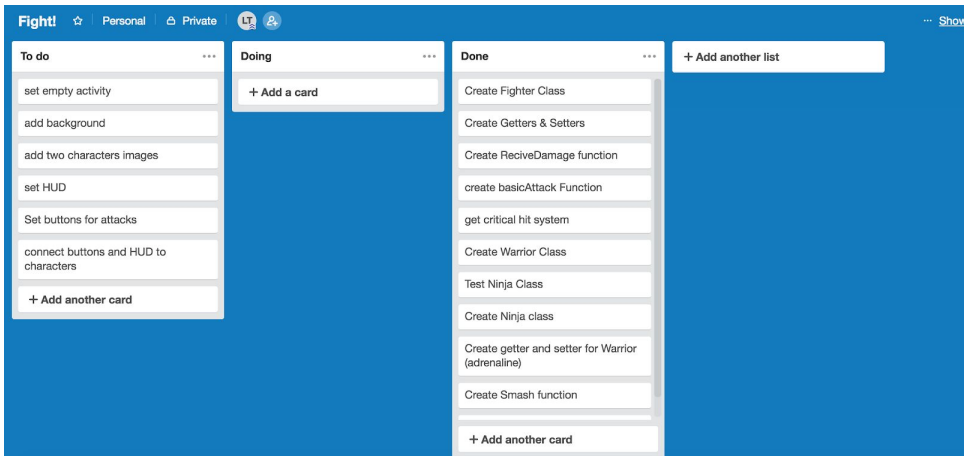
P. 12 Screenshot of your planning and the different stages of development to show changes.

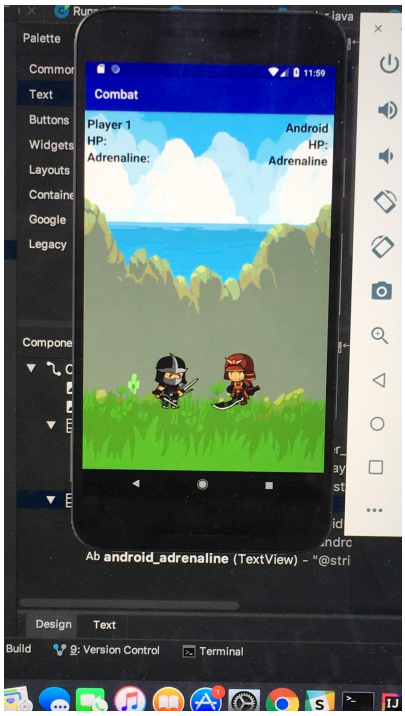


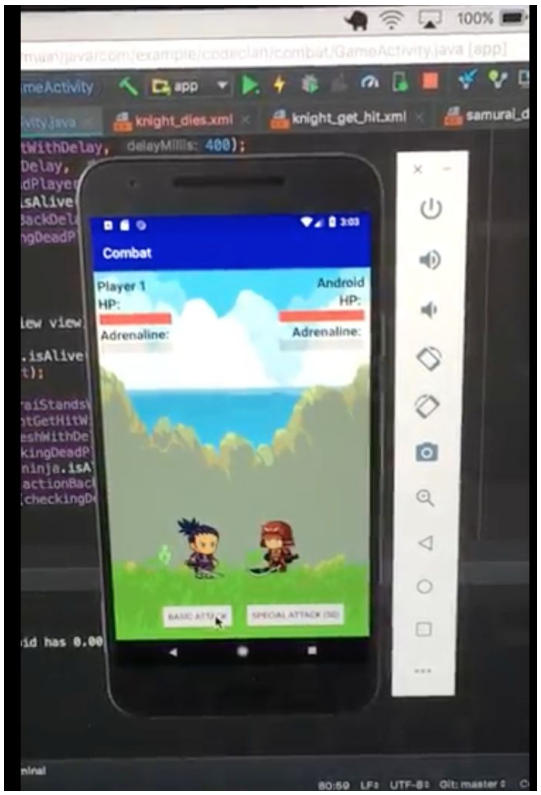




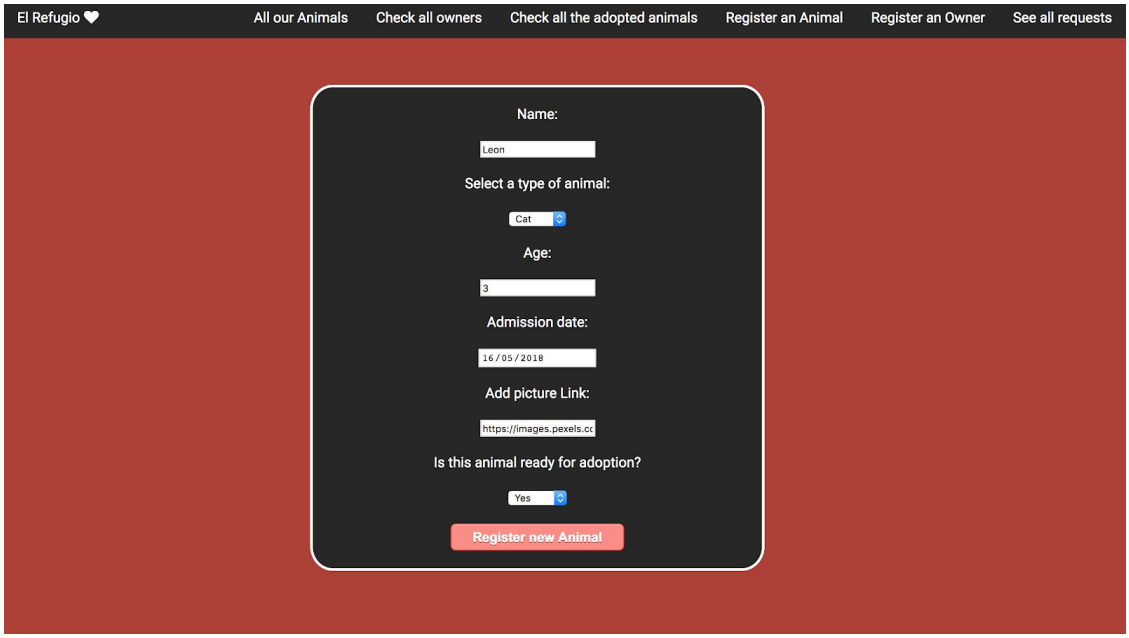

Warrior
com.example.codeclan.combat (androidTest)
com.example.codeclan.combat (test)
ArenaTest
ClericTest
ExampleUnitTest
KnightTest
NinjaTest
res
Gradle Scripts
Runner
"/Applications/Android Studio.app/Contents/jre/jdk/Contents/Home/bin/java"
Ninja is fighting Cleric:
Cleric has received 35.00 damage! - Cleric has 165.00 hp left!!
Ninja has received 32.00 damage! - Ninja has 168.00 hp left!!
Cleric has received 31.00 damage! - Cleric has 134.00 hp left!!
Cleric has healed itself 50.00 points of HP - Cleric has 196.50 hp!
Cleric has received 50.00 damage! - Cleric has 146.50 hp left!!
Ninja used a Special attack!
Ninja has received a critical hit of 70.00 damage! - Ninja has 98.00 hp le
Cleric has received 27.00 damage! - Cleric has 119.50 hp left!!
Cleric has healed itself 50.00 points of HP - Cleric has 182.00 hp!
Run
TODO
6: Logcat
9: Version Control
Terminal
Build
Gradle build finished in 237ms (moments ago)


Fight!
Personal
Private
Show
To do
set empty activity
add background
add two characters images
set HUD
Set buttons for attacks
connect buttons and HUD to characters
+ Add another card
Doing
+ Add a card
Done
Create Fighter Class
Create Getters & Setters
Create ReciveDamage function
create basicAttack Function
get critical hit system
Create Warrior Class
Test Ninja Class
Create Ninja class
Create getter and setter for Warrior (adrenaline)
Create Smash function
+ Add another card
+ Add another list

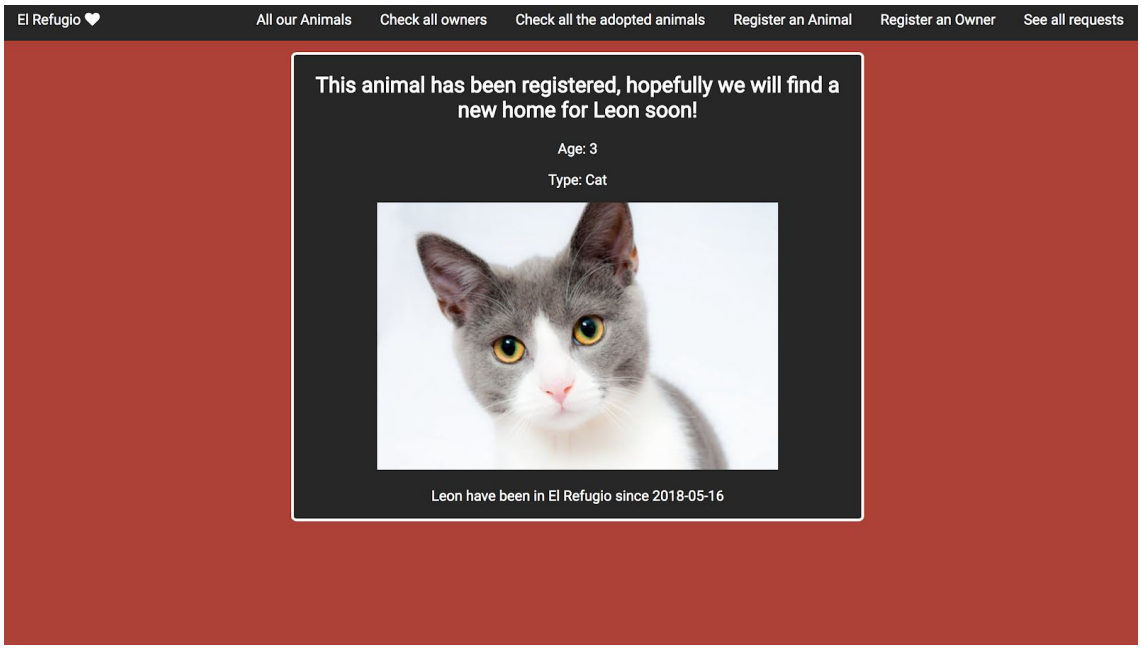

Palette
Combat
Player 1
HP:
Adrenaline:
Android
HP:
Adrenaline
Ab android_adrenaline (TextView) - "@stri
Design
Text
Build
9: Version Control
Terminal


Combat
Player 1
HP:
Adrenaline:
Android
HP:
Adrenaline:

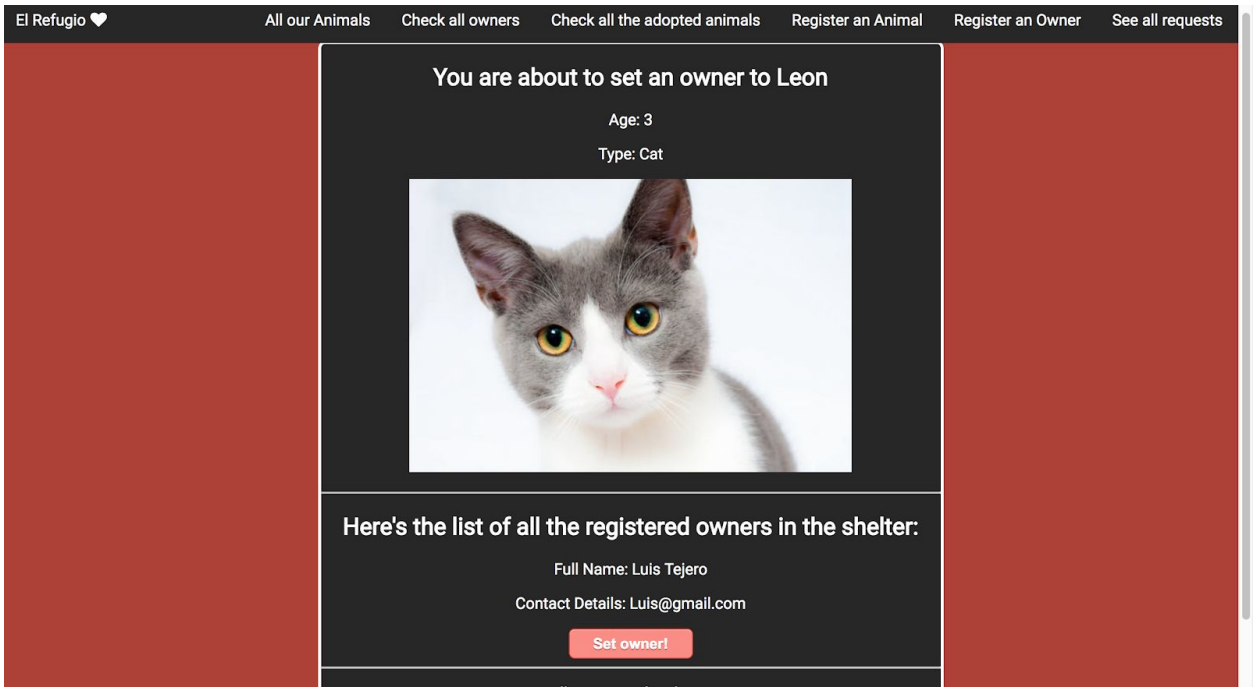
P. 13 User input

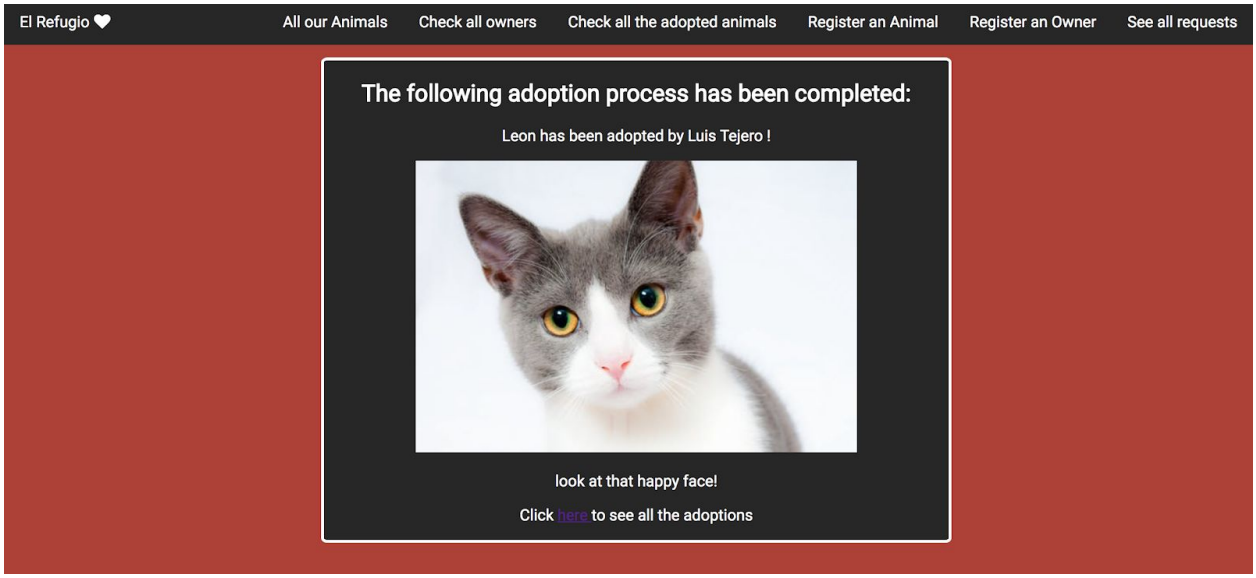


Input being added:

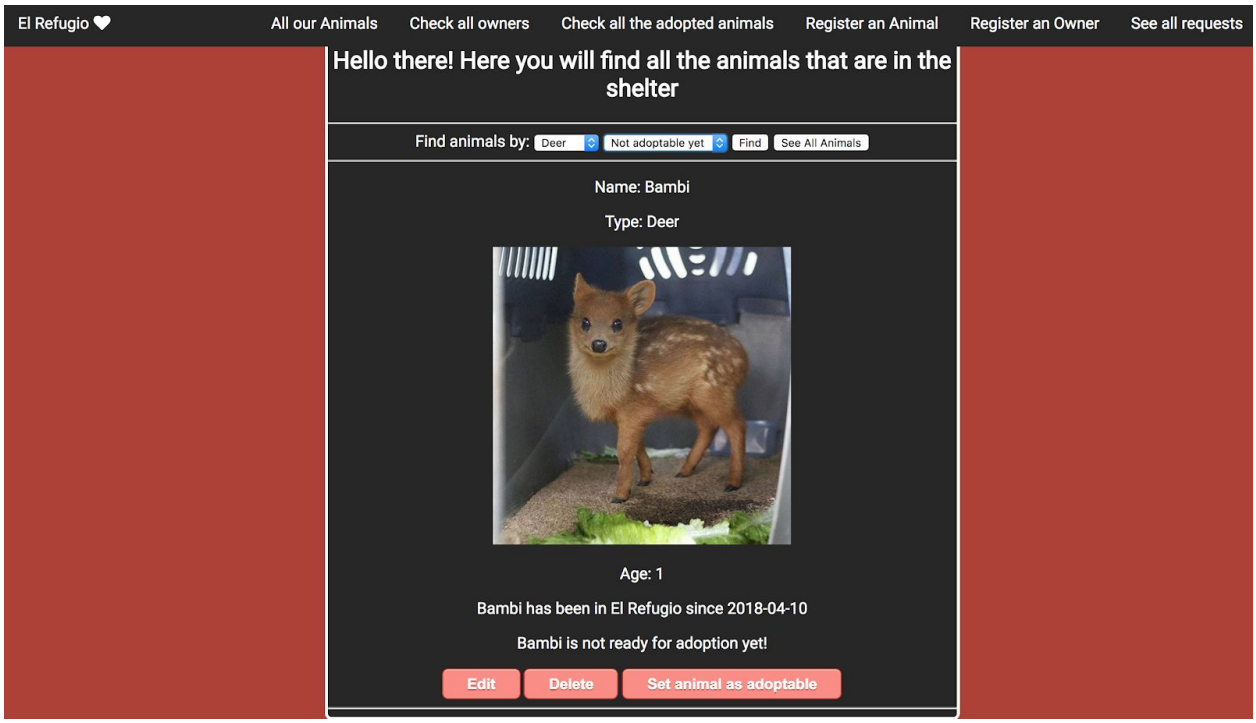


P. 14 Interaction with data persistence





P. 15 User output result



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

```
const RequestHelper = function (url) {
  this.url = url
}

RequestHelper.prototype.get = function () {
  return fetch(this.url)
    .then(response => response.json());
}


module.exports = RequestHelper;

```

```
const Characters = require('./models/characters.js');
const CharactersView = require('./views/characters_view.js');

document.addEventListener('DOMContentLoaded', () => {
  const dropDown = document.querySelector('#houses');
  const characterInfo = document.querySelector('#characters');
  const characters = new Characters('https://api.got.show/api/characters/')
  characters.getData();
  characters.bindEvents();
  const characterView = new CharactersView(characterInfo, dropDown);
  characterView.bindEvents();
})

```

```
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

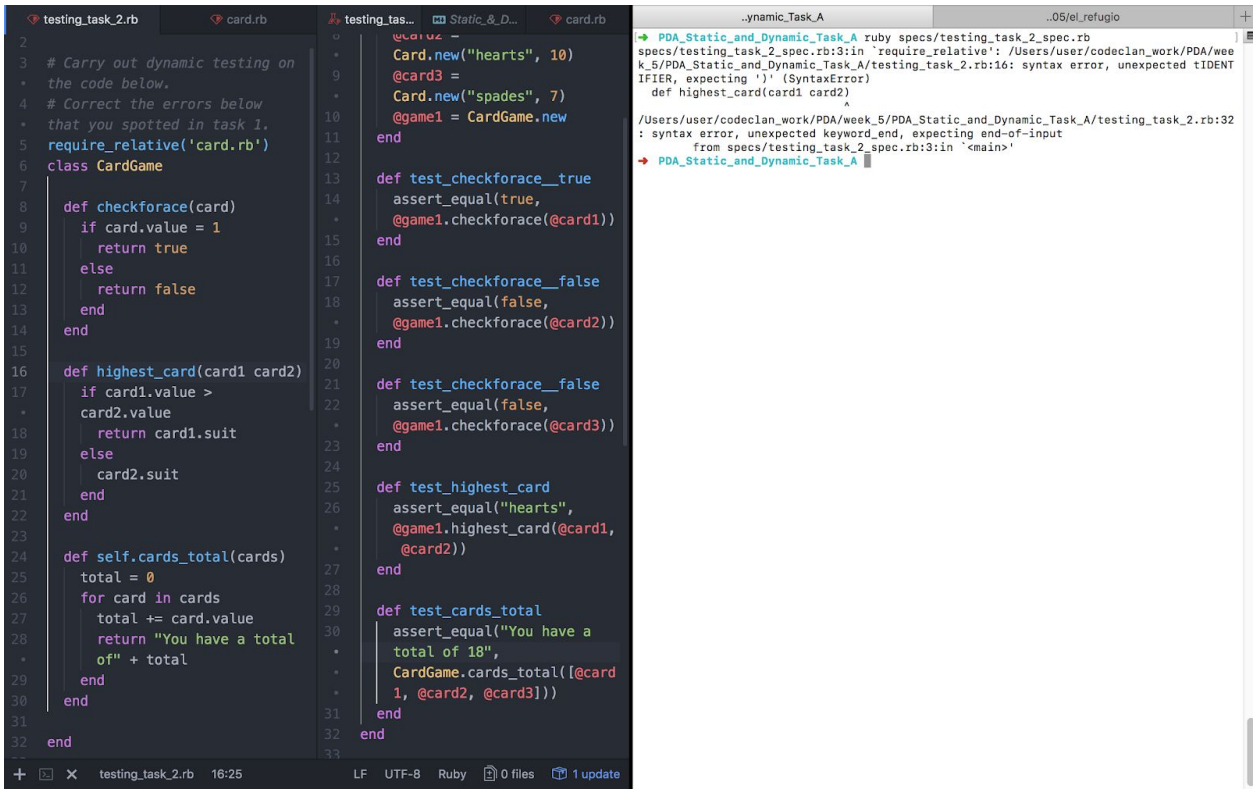
P. 17 Testing your program

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<=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 plant 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

```ruby
# Carry out dynamic testing on
# the code below.
# Correct the errors below
# that you spotted in task 1.
require_relative('card.rb')
class CardGame

  def checkforace(card)
    if card.value = 1
      return true
    else
      return false
    end
  end

  def highest_card(card1 card2)
    if card1.value >
    card2.value
      return card1.suit
    else
      card2.suit
    end
  end

  def self.cards_total(cards)
    total = 0
    for card in cards
      total += card.value
      return "You have a total
      of" + total
    end
  end

end
```

testing_task_2.rb 16:25 LF UTF-8 Ruby 0 files 1 update

testing_tas... Static_&_D... card.rb

```ruby
    Card.new("hearts", 10)
    @card3 =
    Card.new("spades", 7)
    @game1 = CardGame.new
  end

  def test_checkforace__true
    assert_equal(true,
    @game1.checkforace(@card1))
  end

  def test_checkforace__false
    assert_equal(false,
    @game1.checkforace(@card2))
  end

  def test_checkforace__false
    assert_equal(false,
    @game1.checkforace(@card3))
  end

  def test_highest_card
    assert_equal("hearts",
    @game1.highest_card(@card1,
     @card2))
  end

  def test_cards_total
    assert_equal("You have a
    total of 18",
    CardGame.cards_total([@card
    1, @card2, @card3]))
  end
end
```

..ynamic_Task_A ..05/el_refugio

```
➜ PDA_Static_and_Dynamic_Task_A ruby specs/testing_task_2_spec.rb
specs/testing_task_2_spec.rb:3:in `require_relative': /Users/user/codeclan_work/PDA/wee
k_5/PDA_Static_and_Dynamic_Task_A/testing_task_2.rb:16: syntax error, unexpected tIDENT
IFIER, expecting ')' (SyntaxError)
  def highest_card(card1 card2)
                         ^
/Users/user/codeclan_work/PDA/week_5/PDA_Static_and_Dynamic_Task_A/testing_task_2.rb:32
: syntax error, unexpected keyword_end, expecting end-of-input
        from specs/testing_task_2_spec.rb:3:in `<main>'
➜ PDA_Static_and_Dynamic_Task_A
```

Test File done

```ruby
require("minitest/autorun")
require("minitest/rg")
require_relative("../testing_task_2")

class CardTest < MiniTest::Test
  def setup
    @card1 = Card.new("ace", 1)
    @card2 = Card.new("hearts", 10)
    @card3 = Card.new("spades", 7)
    @card4 = Card.new("joker", 0)
    @game1 = CardGame.new
  end

  def test_check_for_ace__true
    assert_equal(true, @game1.check_for_ace(@card1))
  end

  def test_check_for_ace__false
    assert_equal(false, @game1.check_for_ace(@card2))
  end

  def test_check_for_ace__false2
    assert_equal(false, @game1.check_for_ace(@card3))
  end

  def test_highest_card__hearts
    assert_equal("hearts",  @game1.highest_card(@card1, @card2))
  end

  def test_highest_card__spades
    assert_equal("spades",  @game1.highest_card(@card1, @card3))
  end

  def test_highest_card__ace
    assert_equal("ace",  @game1.highest_card(@card4, @card1))
  end


  def test_cards_total__18
    assert_equal("You have a total of 18",  CardGame.cards_total([@card1, @card2, @card3]))
  end

  def test_cards_total__17
    assert_equal("You have a total of 17",  CardGame.cards_total([@card2, @card3]))
  end

  def test_cards_total__1
    assert_equal("You have a total of 1",  CardGame.cards_total([@card1]))
  end
end

```

Class file done

```ruby
### Testing task 2 code:

# Carry out dynamic testing on the code below.
# Correct the errors below that you spotted in task 1.
require_relative('card.rb')
class CardGame

  def check_for_ace(card)
    if card.value == 1
      return true
    else
      return false
    end
  end

  def highest_card(card1, card2)
    if card1.value > card2.value
      return card1.suit
    else
      card2.suit
    end
  end

  def self.cards_total(cards)
    total = 0
    for card in cards
      total += card.value
    end
    return "You have a total of #{total}"
  end

end
```

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
```