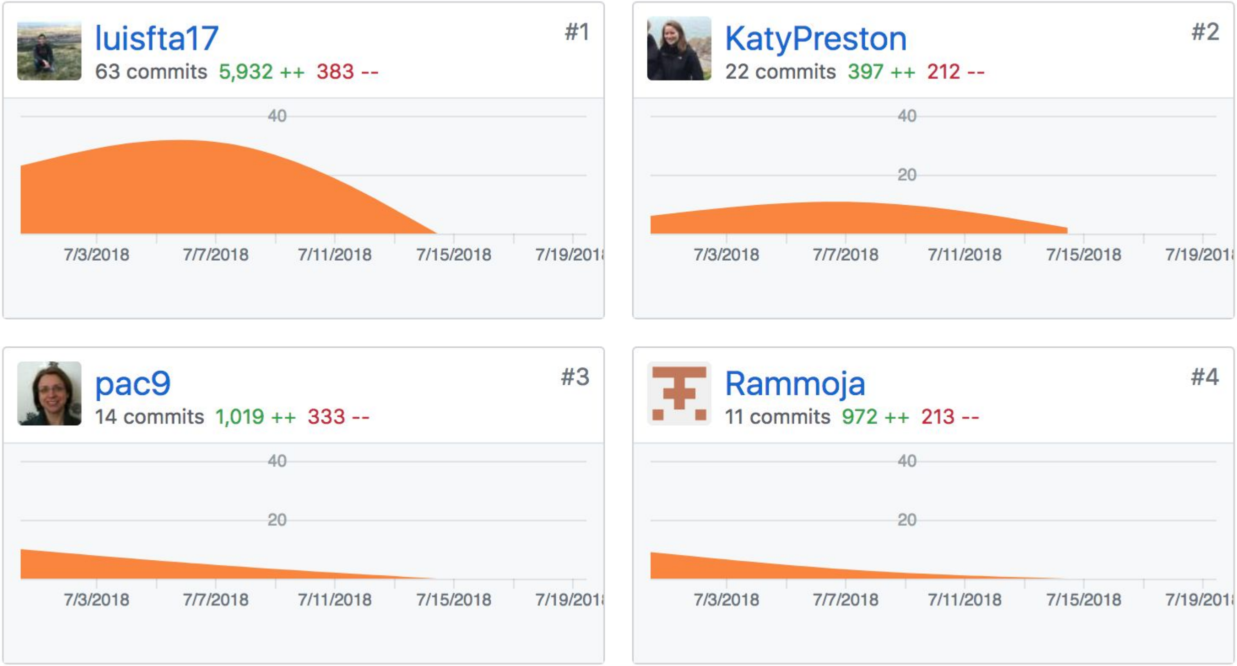
Evidence for Project Unit

Katy Preston
Cohort: E21

P. 1 Github Contributors Page



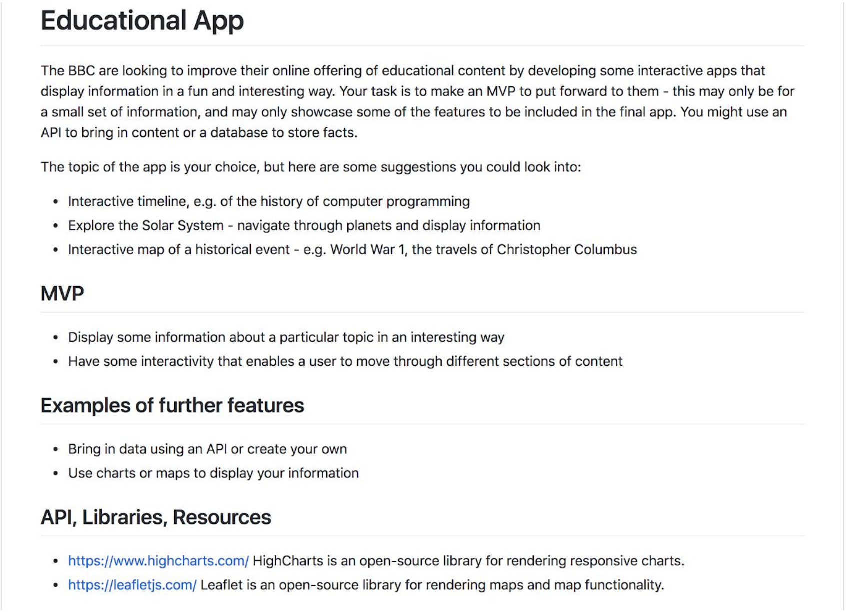
luisfta17 #1
63 commits 5,932 ++ 383 --

KatyPreston #2
22 commits 397 ++ 212 --

pac9 #3
14 commits 1,019 ++ 333 --

Rammoja #4
11 commits 972 ++ 213 --

P. 2 Project Brief (Group Project)



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

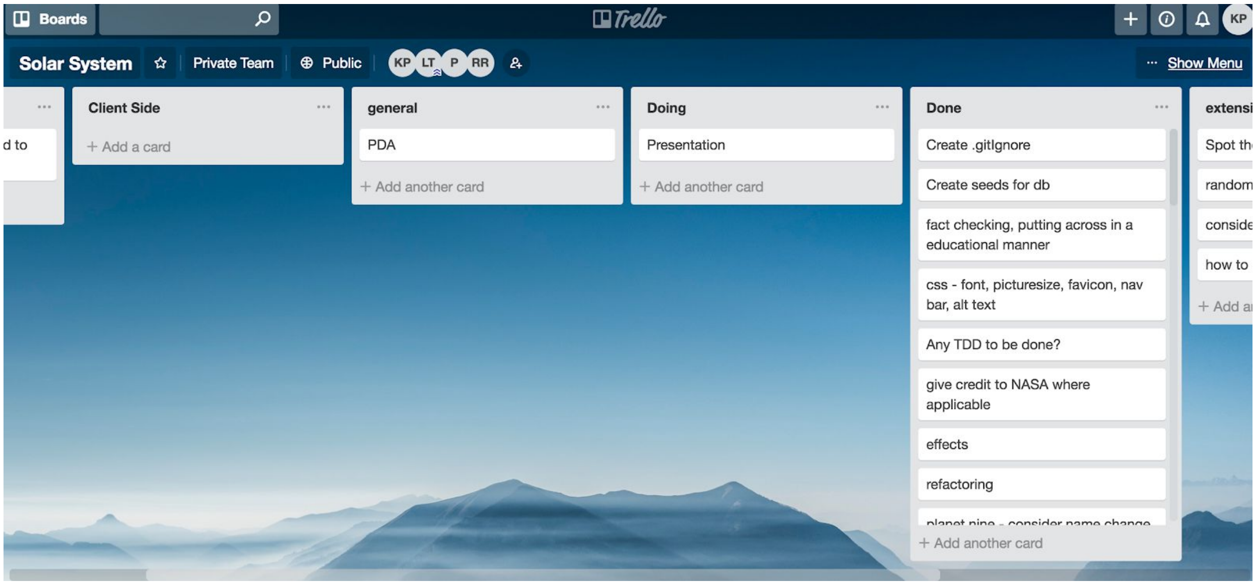
Examples of further features

- 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 (Group Project)



d to

Client Side

+ Add a card

general

PDA

+ Add another card

Doing

Presentation

+ Add another card

Done

- Create .gitIgnore
- Create seeds for db
- fact checking, putting across in a educational manner
- css - font, picturesize, favicon, nav bar, alt text
- Any TDD to be done?
- give credit to NASA where applicable
- effects
- refactoring
- planet nine - consider name change

+ Add another card

extensi

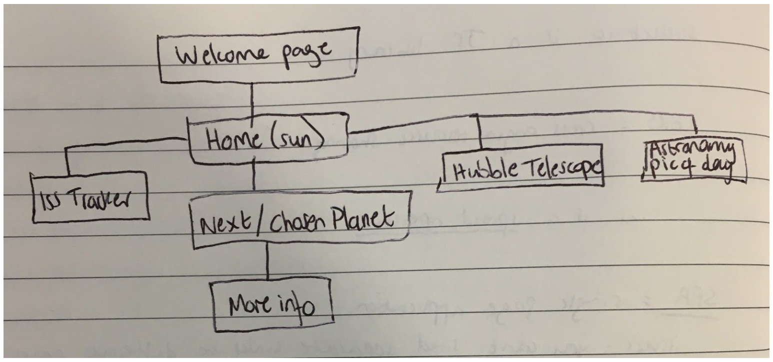
- Spot th
- random
- conside
- how to

+ Add a

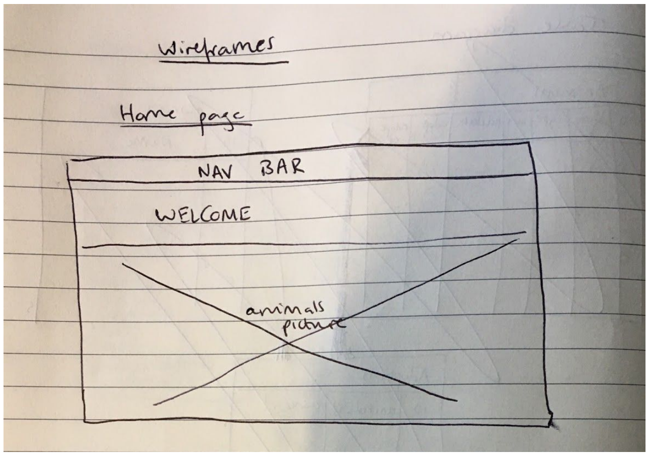
P. 4 Acceptance Criteria

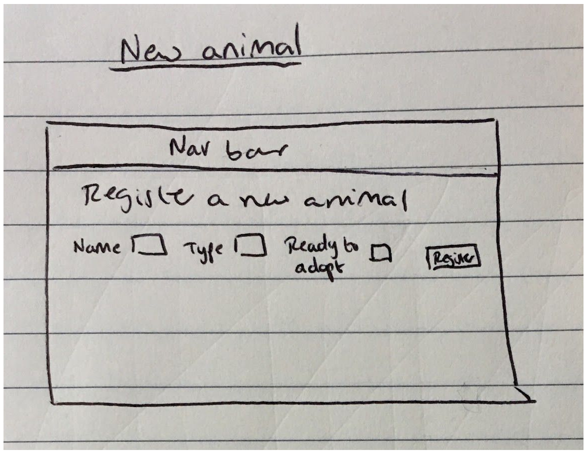
Acceptance Criteria	Expected outcome	Pass/Fail
Be able to see a list of planets	See a list in the dropdown	Pass
Be able to see the information for each planet	When more info button is clicked, more information is displayed	Pass
Be able to track the ISS	When ISS link clicked, see a map with its location 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



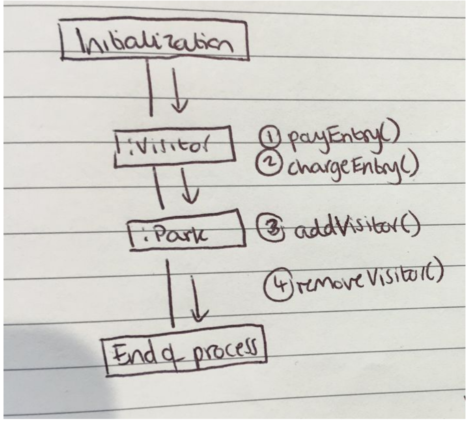
P. 6 Wireframes Designs



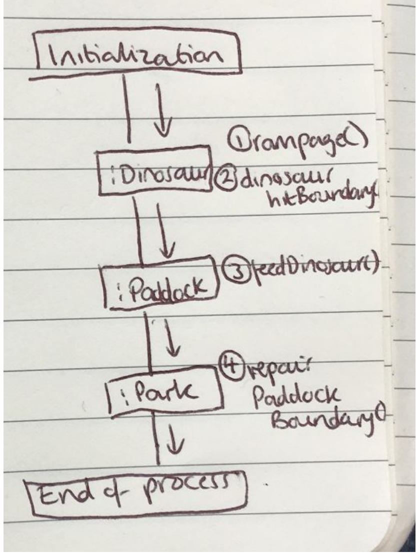


P. 7 System Interactions Diagrams

Collaboration diagram shows interaction between visitor and park. Visitor pays entry to park and park adds a visitor to its visitor count. When visitor leaves it is then removed from the park's visitor count.

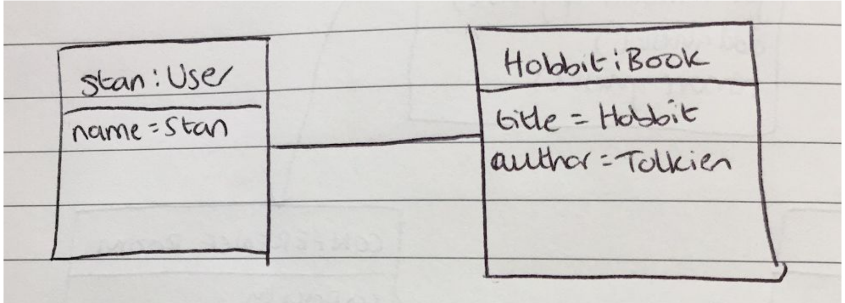


Collaboration diagram showing interaction between a dinosaur, paddock within a park and the park itself. The dinosaur gets hungry and so it can rampage and hit the paddock boundary, causing damage to the paddock boundary. The paddock is responsible for feeding the dinosaur so it can't rampage, and the park repairs the paddock boundary.

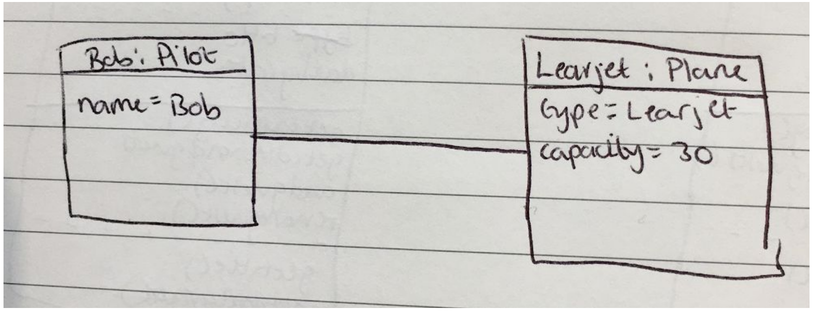


P. 8 Two Object Diagrams

Stan is a user, Hobbit is a Book

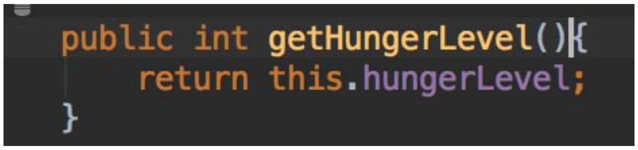


Bob is a Pilot, Learjet is the Plane

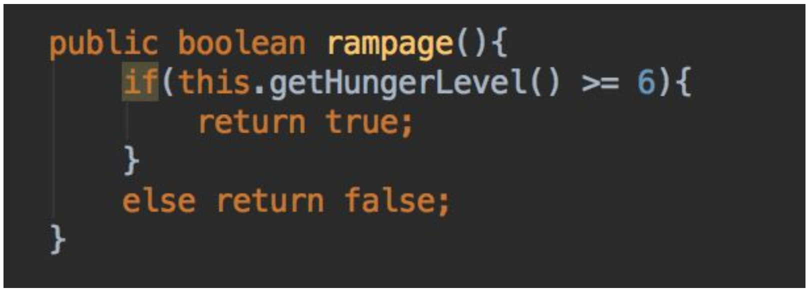


P. 9 Choice of two algorithms

The rampage() method is called on the dinosaur and uses the getHungerLevel() to see if the dinosaur can rampage or not (the dinosaur can rampage if the hunger level is 6 or above).

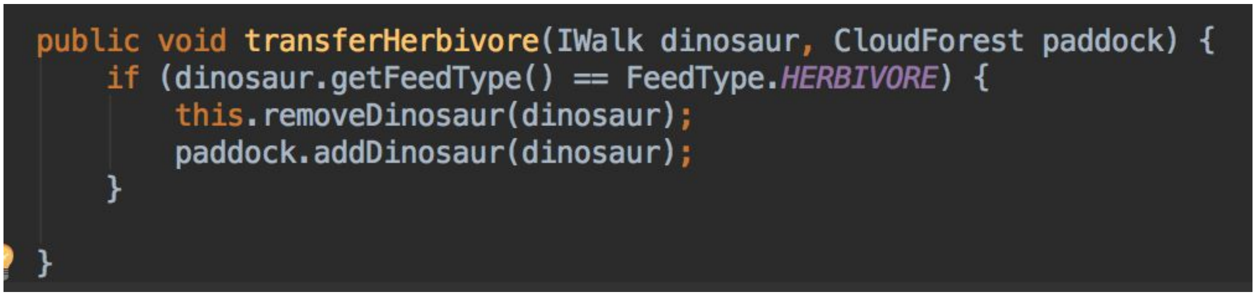


```java
public int getHungerLevel(){
    return this.hungerLevel;
}
```



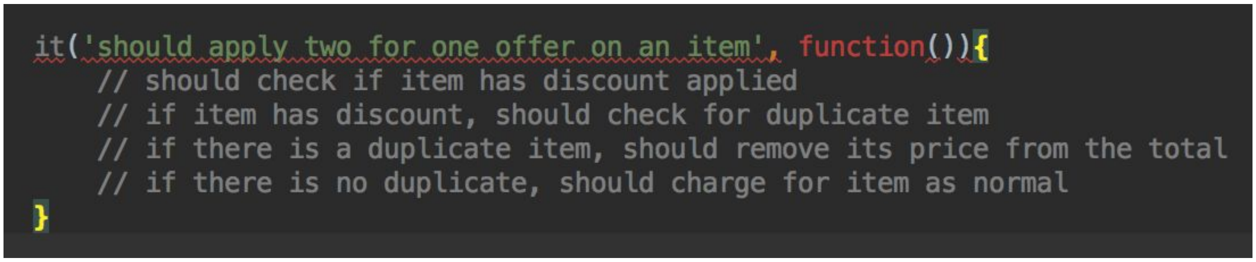
```java
public boolean rampage(){
    if(this.getHungerLevel() >= 6){
        return true;
    }
    else return false;
}
```

The paddock has a method to transfer a dinosaur to another paddock if it is a herbivore.



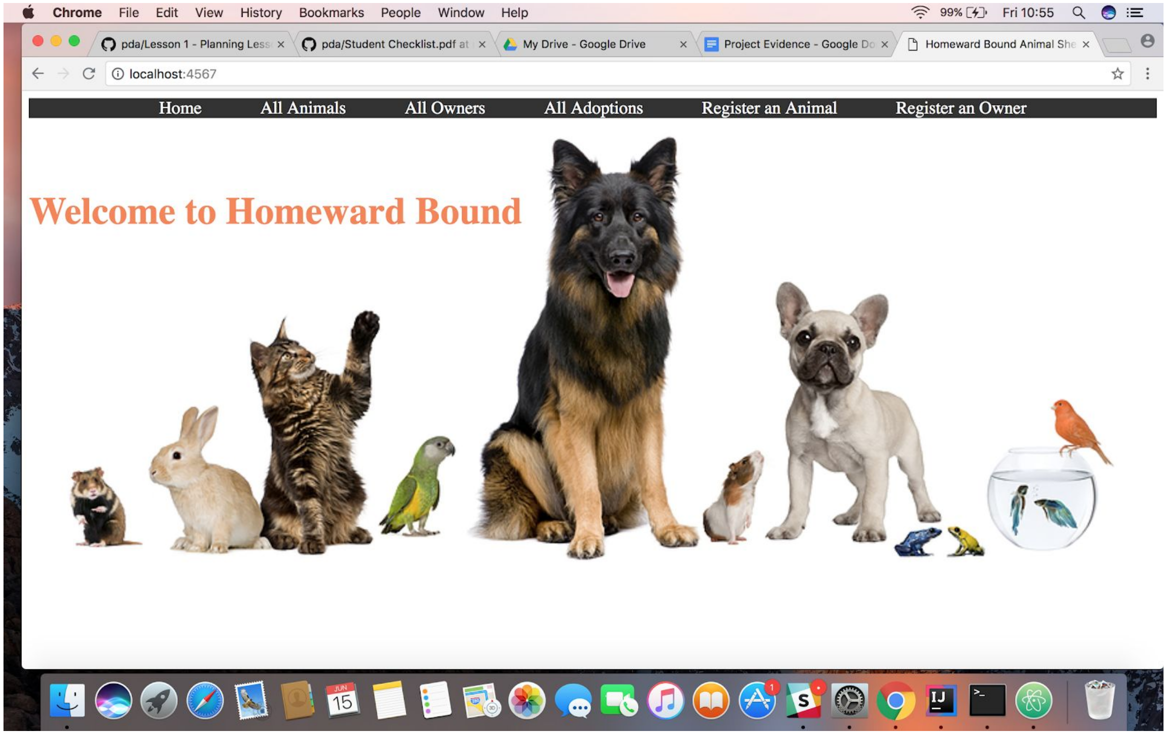
```java
public void transferHerbivore(IWalk dinosaur, CloudForest paddock) {
    if (dinosaur.getFeedType() == FeedType.HERBIVORE) {
        this.removeDinosaur(dinosaur);
        paddock.addDinosaur(dinosaur);
    }

}
```

P. 10 Example of Pseudocode



```javascript
it('should apply two for one offer on an item', function(){
    // should check if item has discount applied
    // if item has discount, should check for duplicate item
    // if there is a duplicate item, should remove its price from the total
    // if there is no duplicate, should charge for item as normal
}
```

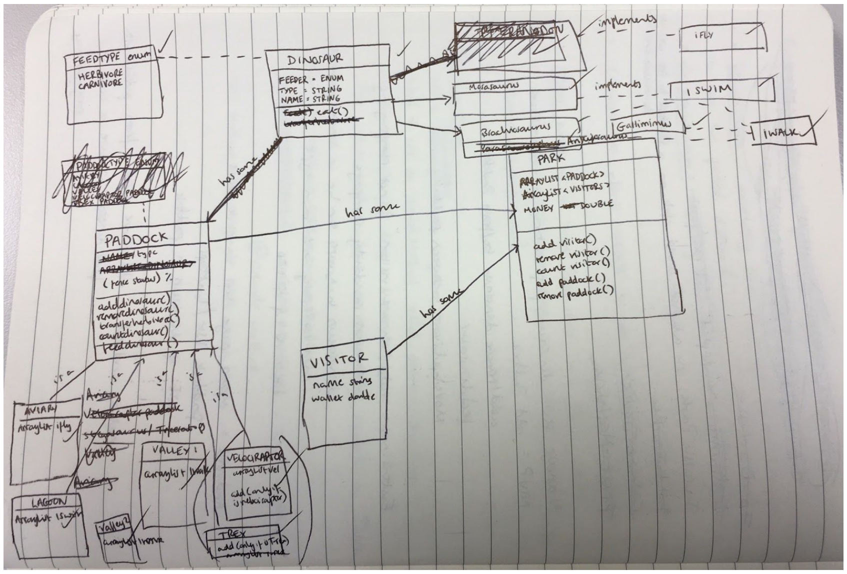
P. 11 Github link to a project


Chrome File Edit View History Bookmarks People Window Help
99% Fri 10:55
pda/Lesson 1 - Planning Less
pda/Student Checklist.pdf at
My Drive - Google Drive
Project Evidence - Google Do
Homeward Bound Animal She
localhost:4567
Home
All Animals
All Owners
All Adoptions
Register an Animal
Register an Owner
Welcome to Homeward Bound

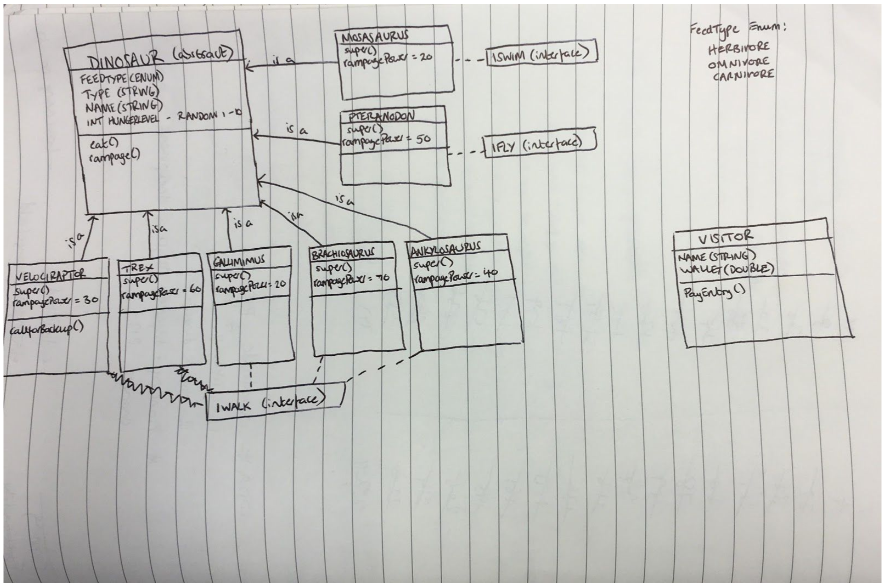
https://github.com/KatyPreston/animal_shelter_project.git

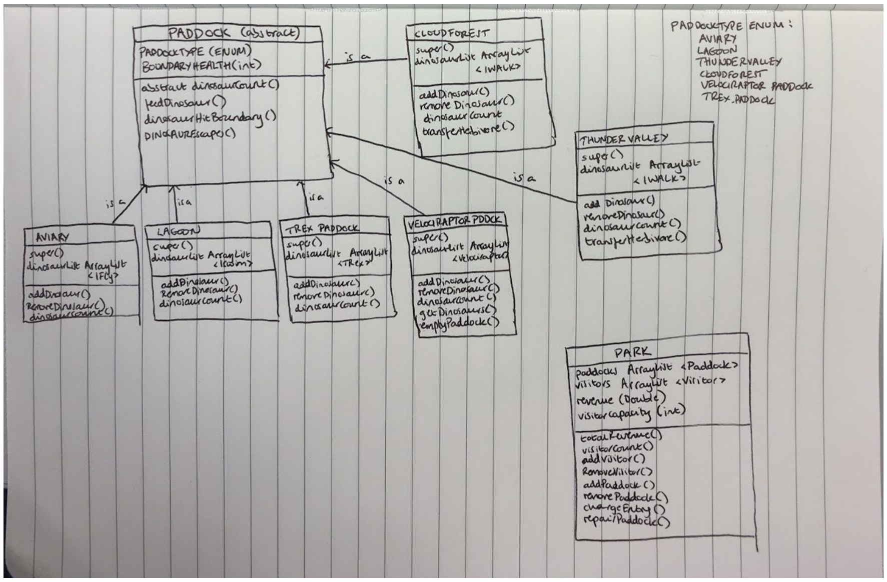
P. 12 Planning and different stages of development

Initial planning stage:



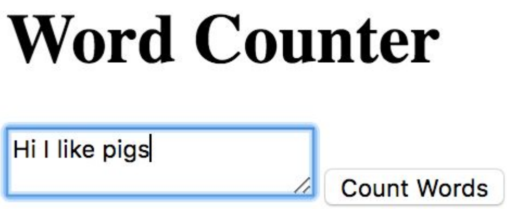
Final plan showing final class relationships, interfaces and added methods:





P. 13 User input

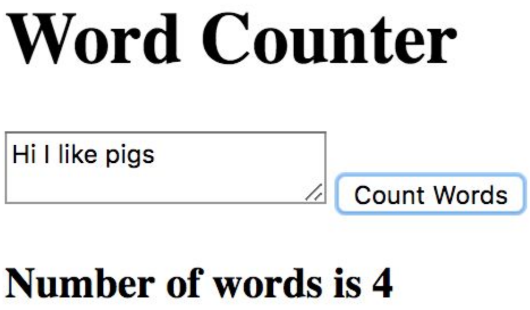
User inputs words:



Word Counter

Hi I like pigs

Inputted words counted:



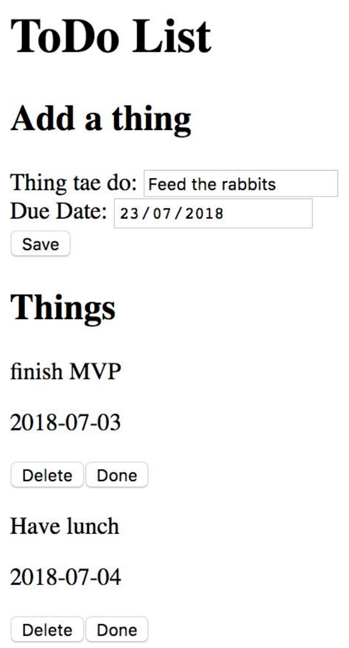
Word Counter

Hi I like pigs

Number of words is 4

P. 14 Interaction with data persistence

User inputting thing to do:



ToDo List

Add a thing

Thing tae do: Feed the rabbits

Due Date: 23/07/2018

Things

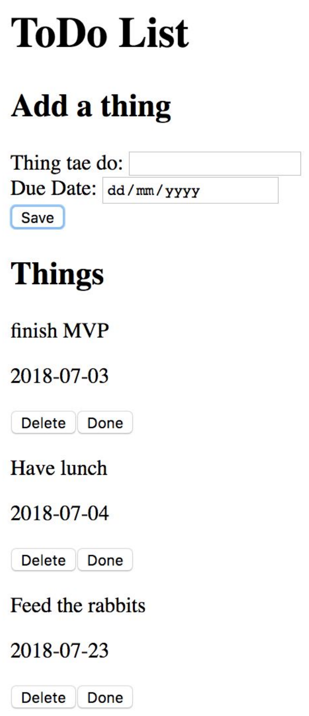
finish MVP

2018-07-03

Have lunch

2018-07-04

Feed the rabbits saved in list. This remains even when page refreshed.



ToDo List

Add a thing

Thing tae do:

Due Date: dd/mm/yyyy

Things

finish MVP

2018-07-03

Have lunch

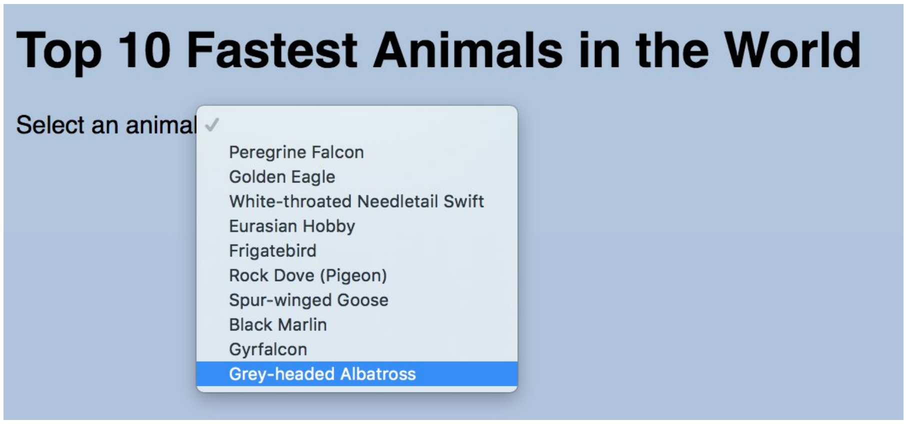
2018-07-04

Feed the rabbits

2018-07-23

P. 15 User output result

User selecting an animal from the dropdown list

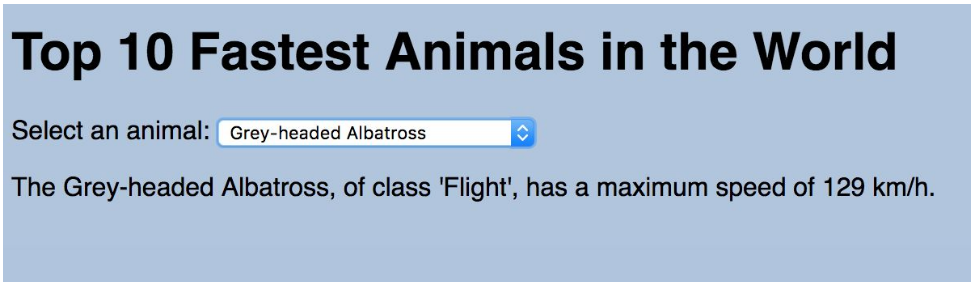


Top 10 Fastest Animals in the World

Select an animal ✓

Peregrine Falcon
Golden Eagle
White-throated Needletail Swift
Eurasian Hobby
Frigatebird
Rock Dove (Pigeon)
Spur-winged Goose
Black Marlin
Gyrfalcon
Grey-headed Albatross

User request processed and information presented in program



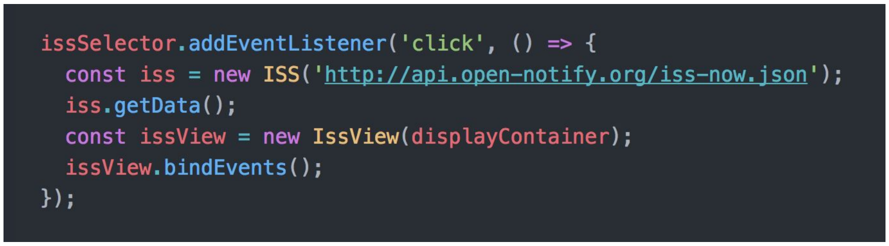
Top 10 Fastest Animals in the World

Select an animal: Grey-headed Albatross

The Grey-headed Albatross, of class 'Flight', has a maximum speed of 129 km/h.

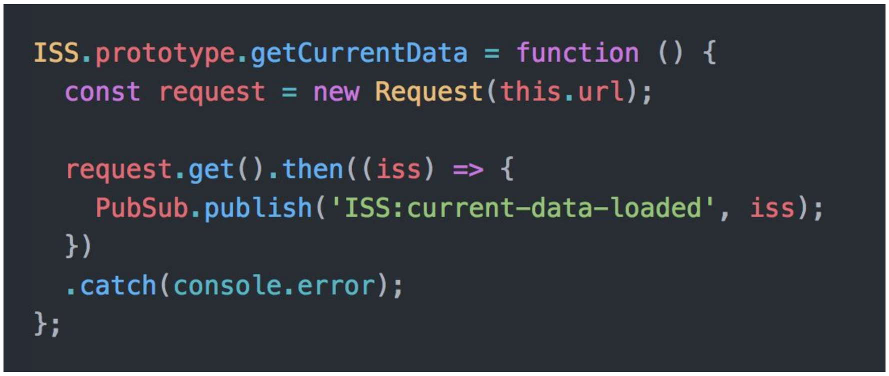
P. 16 API being used

app.js has an event listener that requests data from the API when the ISS link is clicked on the nav bar



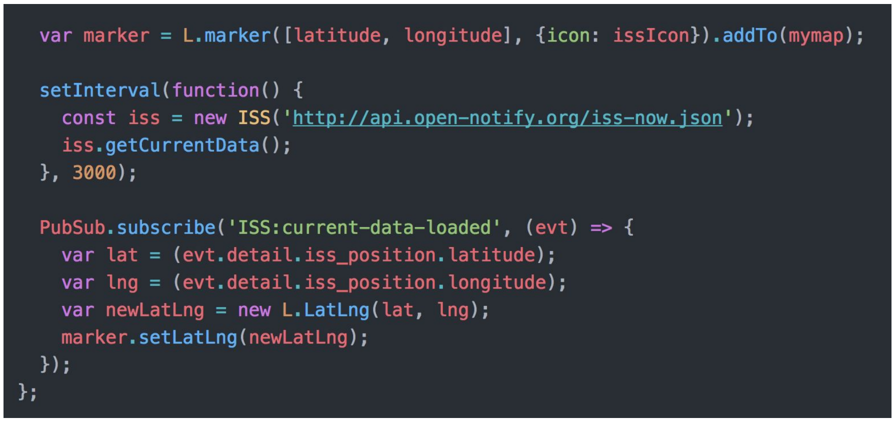
```
issSelector.addEventListener('click', () => {
  const iss = new ISS('http://api.open-notify.org/iss-now.json');
  iss.getData();
  const issView = new IssView(displayContainer);
  issView.bindEvents();
});
```

The ISS model has a method to get the current position of the ISS



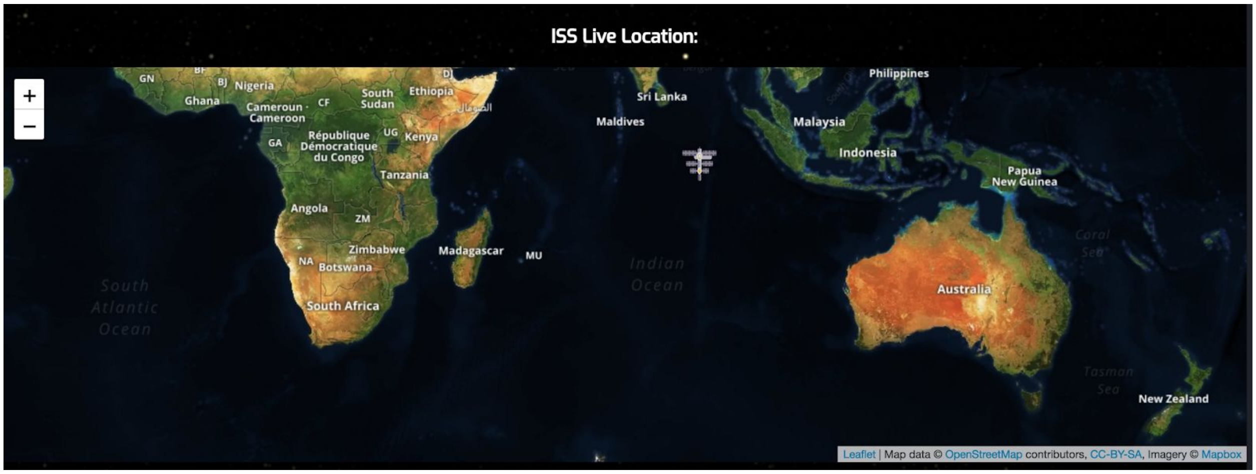
```
ISS.prototype.getCurrentData = function () {
  const request = new Request(this.url);

  request.get().then((iss) => {
    PubSub.publish('ISS:current-data-loaded', iss);
  })
  .catch(console.error);
};
```

The ISSView calls the getCurrentData function every 3 seconds to move the marker on the map.



```
  var marker = L.marker([latitude, longitude], {icon: issIcon}).addTo(mymap);

  setInterval(function() {
    const iss = new ISS('http://api.open-notify.org/iss-now.json');
    iss.getCurrentData();
  }, 3000);

  PubSub.subscribe('ISS:current-data-loaded', (evt) => {
    var lat = (evt.detail.iss_position.latitude);
    var lng = (evt.detail.iss_position.longitude);
    var newLatLng = new L.LatLng(lat, lng);
    marker.setLatLng(newLatLng);
  });
};
```

Program running using the API to get the current location of the ISS and render it to the map.



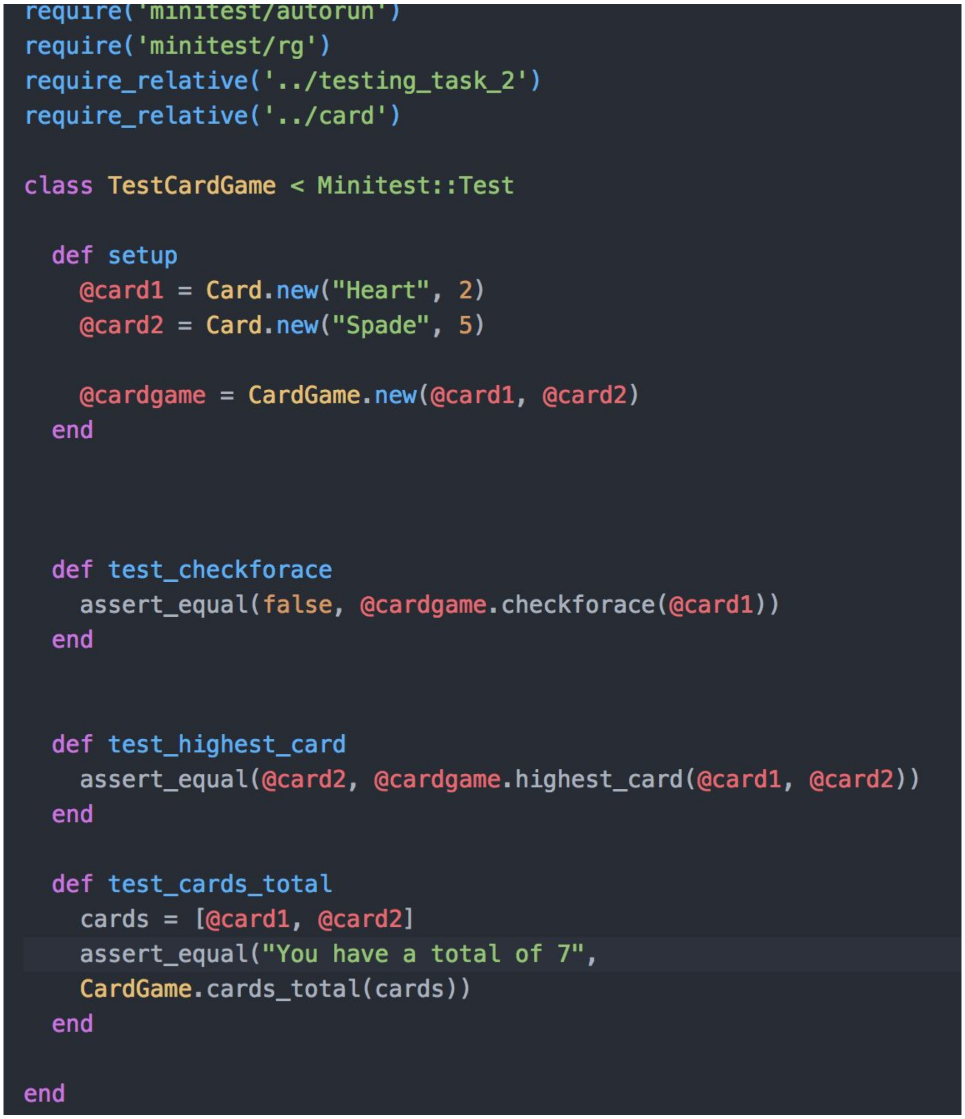
ISS Live Location:

P. 17 Bug tracking report showing errors diagnosed and corrected

			Pass/Fail
Should be able to scroll past ISS map without zooming on map	Failed	Restricted max zoom on map	Passed
Previous button to go to previous planet	Failed	Previous button was going outside of array, changed logic to prevent from going below 0	Passed
Tracking position of ISS in real time	Failed	Old markers not deleting, resulting in a line of markers. Resolved by resetting lat and long on existing marker instead of creating a new one every 3 seconds	Passed
Next button to get to next planet	Failed	If used after the dropdown menu used to navigate to a specific planet, next button would take us outside of array as dropdown id being seen as a string not an integer, so next button adding to a string. Resolved by using parseInt()	Passed
Back button on more info page should go back to current planet page, not to start again	Failed	Logic changed to ensure back button going back to current planet value not home page	Passed

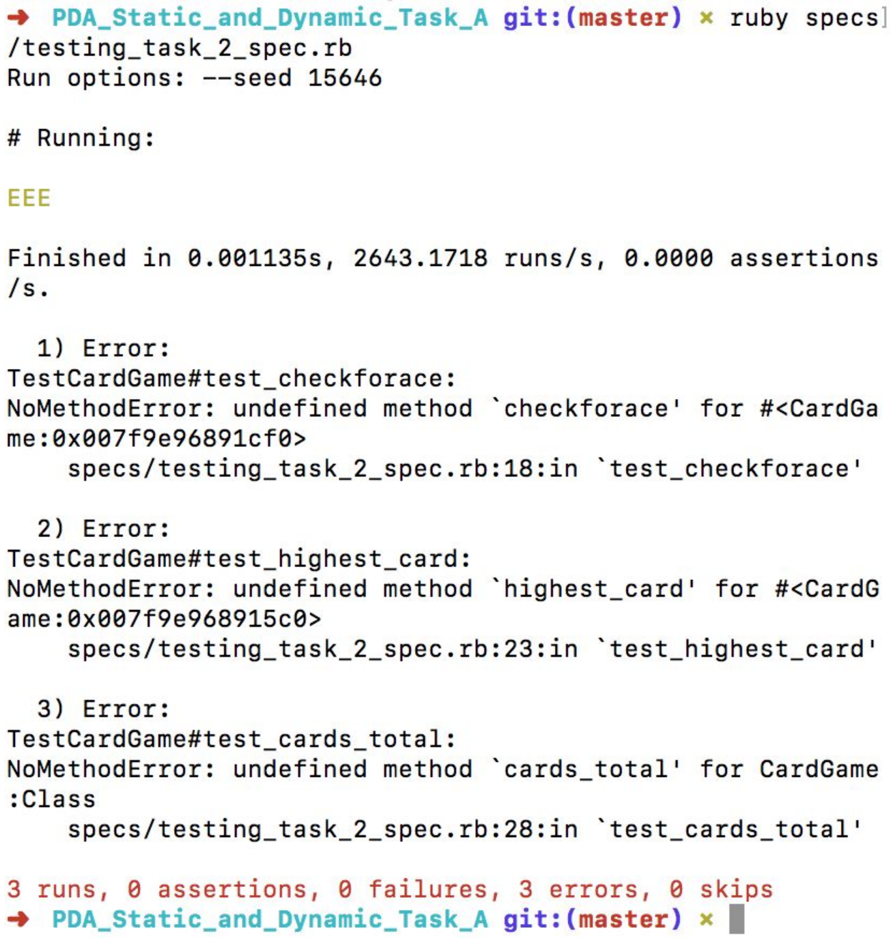
P. 18 Testing in a program

Test code



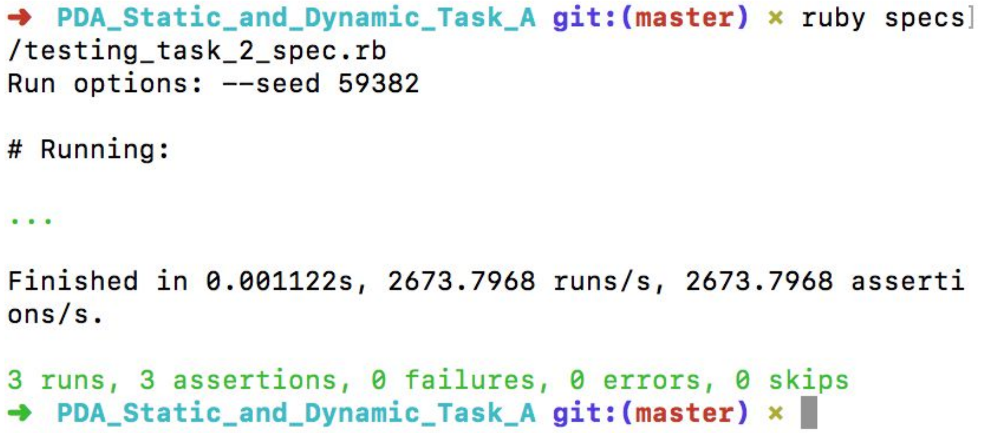
```
require('minitest/autorun')
require('minitest/rg')
require_relative('../testing_task_2')
require_relative('../card')

class TestCardGame < Minitest::Test

  def setup
    @card1 = Card.new("Heart", 2)
    @card2 = Card.new("Spade", 5)

    @cardgame = CardGame.new(@card1, @card2)
  end



  def test_checkforace
    assert_equal(false, @cardgame.checkforace(@card1))
  end


  def test_highest_card
    assert_equal(@card2, @cardgame.highest_card(@card1, @card2))
  end

  def test_cards_total
    cards = [@card1, @card2]
    assert_equal("You have a total of 7",
    CardGame.cards_total(cards))
  end

end
```

Tests not passing



```
➜  PDA_Static_and_Dynamic_Task_A git:(master) × ruby specs]
/testing_task_2_spec.rb
Run options: --seed 15646

# Running:

EEE

Finished in 0.001135s, 2643.1718 runs/s, 0.0000 assertions
/s.

  1) Error:
TestCardGame#test_checkforace:
NoMethodError: undefined method `checkforace' for #<CardGa
me:0x007f9e96891cf0>
    specs/testing_task_2_spec.rb:18:in `test_checkforace'

  2) Error:
TestCardGame#test_highest_card:
NoMethodError: undefined method `highest_card' for #<CardG
ame:0x007f9e968915c0>
    specs/testing_task_2_spec.rb:23:in `test_highest_card'

  3) Error:
TestCardGame#test_cards_total:
NoMethodError: undefined method `cards_total' for CardGame
:Class
    specs/testing_task_2_spec.rb:28:in `test_cards_total'

3 runs, 0 assertions, 0 failures, 3 errors, 0 skips
➜  PDA_Static_and_Dynamic_Task_A git:(master) × 
```

Tests passing



```
➜  PDA_Static_and_Dynamic_Task_A git:(master) × ruby specs]
/testing_task_2_spec.rb
Run options: --seed 59382

# Running:

...

Finished in 0.001122s, 2673.7968 runs/s, 2673.7968 asserti
ons/s.

3 runs, 3 assertions, 0 failures, 0 errors, 0 skips
➜  PDA_Static_and_Dynamic_Task_A git:(master) × 
```