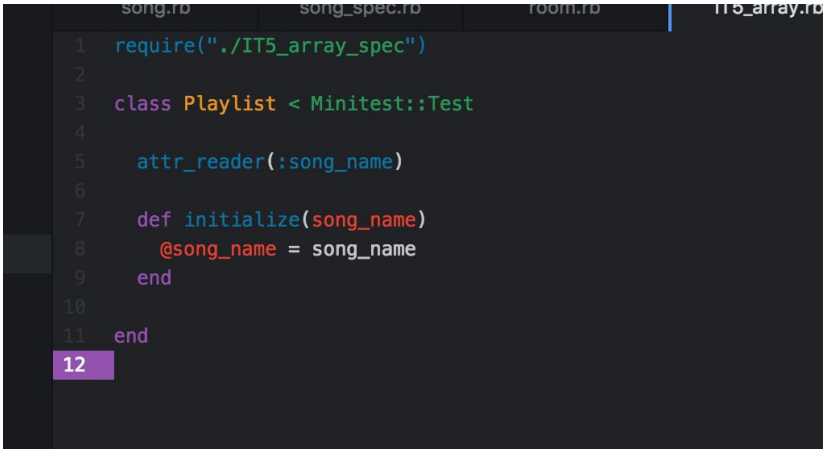
Robert James Bowes

I.T 5 Demonstrate the use of an array in a program



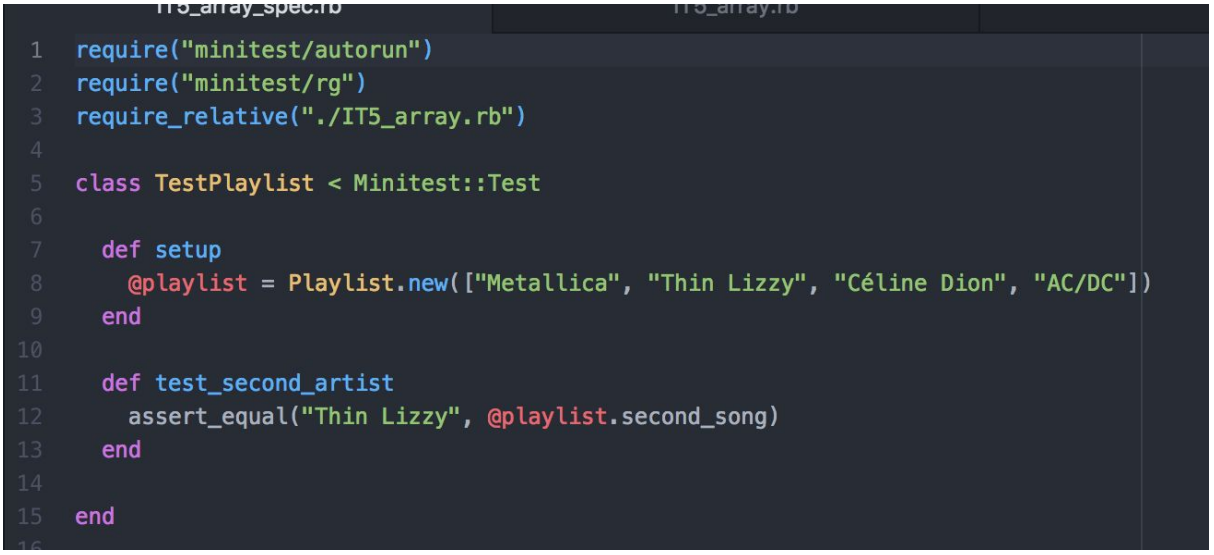
```ruby
require("./IT5_array_spec")

class Playlist < Minitest::Test

  attr_reader(:song_name)

  def initialize(song_name)
    @song_name = song_name
  end

end
```



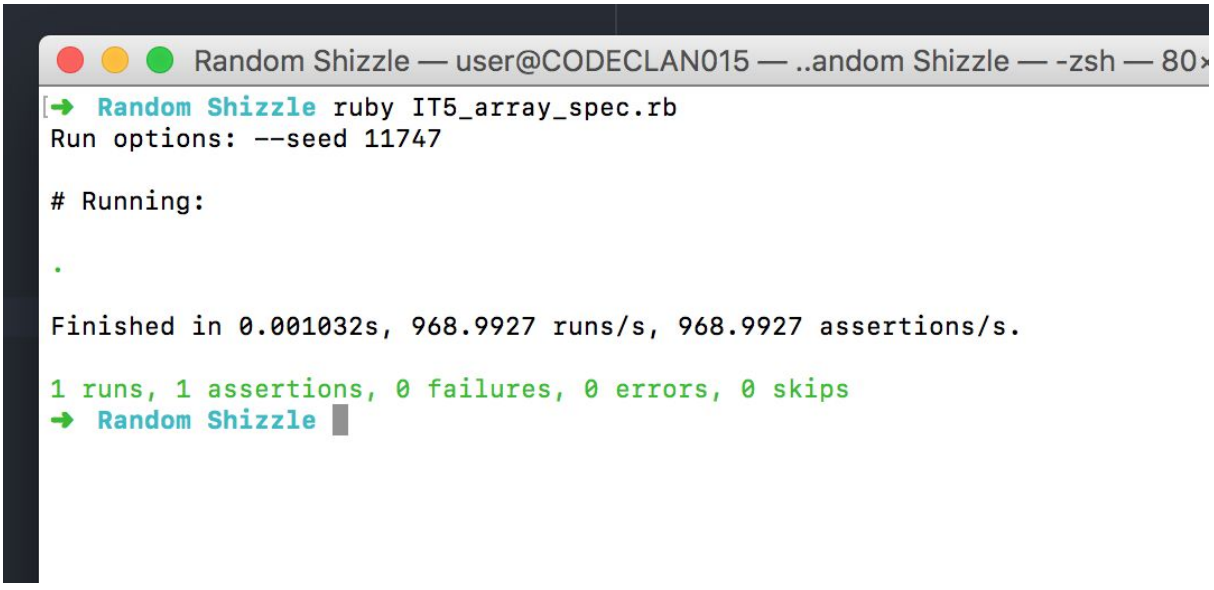
```ruby
require("minitest/autorun")
require("minitest/rg")
require_relative("./IT5_array.rb")

class TestPlaylist < Minitest::Test

  def setup
    @playlist = Playlist.new(["Metallica", "Thin Lizzy", "Céline Dion", "AC/DC"])
  end

  def test_second_artist
    assert_equal("Thin Lizzy", @playlist.second_song)
  end

end
```



```
Random Shizzle — user@CODECLAN015 — ..andom Shizzle — -zsh — 80×
➜  Random Shizzle ruby IT5_array_spec.rb
Run options: --seed 11747

# Running:

.

Finished in 0.001032s, 968.9927 runs/s, 968.9927 assertions/s.

1 runs, 1 assertions, 0 failures, 0 errors, 0 skips
➜  Random Shizzle
```

I.T 6 Demonstrate the use of a hash in a program.

testing_task_1.rb

```ruby
require( "miniTest/autorun" )
require_relative( "./library" )

class TestLibrary < MiniTest::Test

  def setup
    @library = Library.new( [

      { title: "lord of the rings",
        rental_details: {
          student_name: "Jeff",
          date: "01/12/16"
        }
      },
      { title: "lord of the flies",
        rental_details: {
          student_name: "Nicky",
          date: "02/12/16"
        }
      },
      { title: "1984",
        rental_details: {
          student_name: "Thomas",
          date: "03/12/16"
        }
      }
    ] )
  end
```

testing_task_1.rb | testing_task_2.rb

```ruby
class Library

attr_reader(:title, :rental_details, :student_name, :date)
attr_writer(:title, :rental_details, :student_name, :date)

  def initialize(library)
    @library = library
  end

  def all_books
    return @library
  end

  def title_of_first_book
    return @library[0][:title]
  end

end
```

```ruby
  def test_first_book
    book_title = @library.title_of_first_book
    assert_equal( "lord of the rings", book_title )
  end
```

```
Run options: --seed 29577

# Running:

..

Finished in 0.001009s, 1982.1606 runs/s, 1982.1606 assertions/s.

2 runs, 2 assertions, 0 failures, 0 errors, 0 skips
```

I.T 3 Demonstrate searching data in a program.

```ruby
def self.all
  sql = 'SELECT * FROM pets;'
  values = []
  pets_hash = SqlRunner.run(sql, values)
  pets = pets_hash.map { |pet| Pet.new(pet) }
  return pets
end
```

```
[➜  db git:(master) ✗ ruby seeds.rb
[1] pry(main)> Pet.all
 => [#<Pet:0x007fdc85a77f38
   @admission_date="2017-07-15",
   @adoptable="Yes",
   @breed="dog",
   @id=159,
   @name="Douglas McKenzie",
   @picture="/douglas_mckenzie.jpg">,
  #<Pet:0x007fdc85a77d08
   @admission_date="2017-06-22",
   @adoptable="No",
   @breed="cat",
   @id=160,
   @name="Gertrude",
   @picture="/gertrude.png">,
```

I.T 4 Demonstrate sorting data in a program

```ruby
    end

    def self.breed_sort
      return Pet.all.sort_by{ |pet| pet.breed }
    end

```

```
[➜  db git:(master) ✗ ruby seeds.rb
[1] pry(main)> Pet.breed_sort
 => [#<Pet:0x007feebd8cd288
   @admission_date="2017-05-25",
   @adoptable="Yes",
   @breed="bird",
   @id=181,
   @name="Terry",
   @picture="/terry.jpg">,
  #<Pet:0x007feebd8cddc8
   @admission_date="2017-08-12",
   @adoptable="Yes",
   @breed="bird",
   @id=176,
   @name="Birdy McBirdface",
   @picture="/birdy_mcbirdface.jpg">,
  #<Pet:0x007feebd8ce200
   @admission_date="2017-06-22",
   @adoptable="No",
   @breed="cat",
   @id=173,
   @name="Gertrude",
   @picture="/gertrude.png">,
  #<Pet:0x007feebd8ce0c0
   @admission_date="2017-07-25",
   @adoptable="Yes",
   @breed="cat",
   @id=174,
   @name="Prudence",
   @picture="/prudence.jpg">,
```

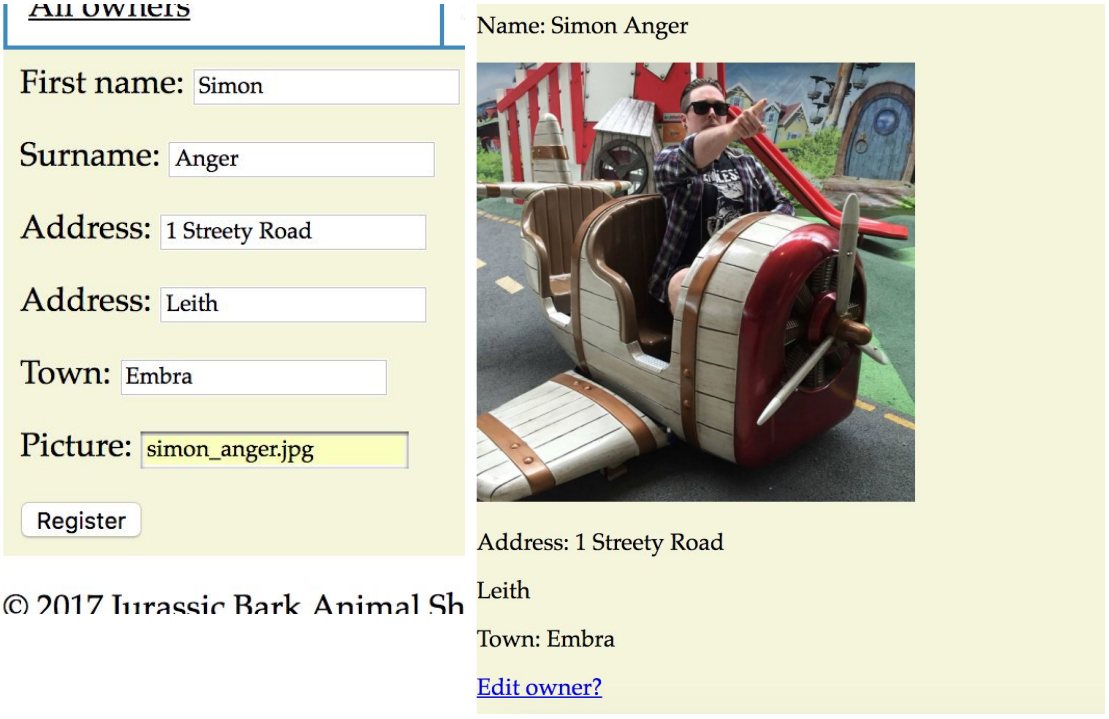
A.D 6

Constraints	Possible effect of constraint	Details
Hardware and software platforms	Was not tested on mobile devices so may not run adequately on all platforms. Not accessible for certain users, cannot market to a large percentage of population.	Although the site is responsive the css could be written to ensure optimum usability/readability.
Performance requirements	The site is locally hosted so only accessible from my laptop.	Ensure that others can access the site: Internet
Persistent storage and transactions	Due to the way the site is set out searching for an individual animal could take a little time due to the lack of a search function	Change the layout of the “all animals” section to ensure that it’s more readable.
Usability	Pictures Granny	
Budgets	There was no budget used in this project	Personal project for the course of codeclan.
Time	I had a week to create the project from scratch which meant that I wasn’t able to fully implement all the features I wanted.	I will go back to the project every so often to improve it and refactor the code as I learn more at CodeClan.

P - P10

```
66
67    def pets()
68      # I want to select all pets from the pets table
69      # Inner join on by using adoption id
70      # return the details and map them to the pet class
71      sql = "SELECT pets.*
72      FROM pets
73      INNER JOIN adoptions
74      ON adoptions.pet_id = pets.id
75      WHERE owner_id = $1"
76      values = [@id]
77      pet_data = SqlRunner.run(sql, values)
78      return pet_data.map { |pet| Pet.new(pet)}
79    end
```

P - P13



P - P14

Name: Dean Anderson | Animal type: other

Dean Anderson has been with us since: 2017-08-22

Dean Anderson is currently up for adoption!

Adopt me!

Edit Dean Anderson

More others

Edit Dean Anderson (188)

Name: Dean Anderson Edited

Type: other

Admission date: 22 / 08 / 2017

Adoptable: Aye

Picture: /dean_anderson.jpg

Edit pet

Name: Dean Anderson Edited | Animal type: other

Dean Anderson Edited has been with us since: 2017-08-22

Dean Anderson Edited is currently up for adoption!

Adopt me!

Edit Dean Anderson Edited

More others

P - P15

All owners | Register an owner | All our pets | Re

Here is a list of all our successful adoptions

All owners | Register an

To adopt a pet please register first.

Owner: Simon Anger

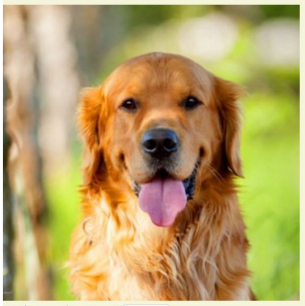
Pet: Douglas McKenzie

Adopt!

All owners | Register an owner | All our pets | R

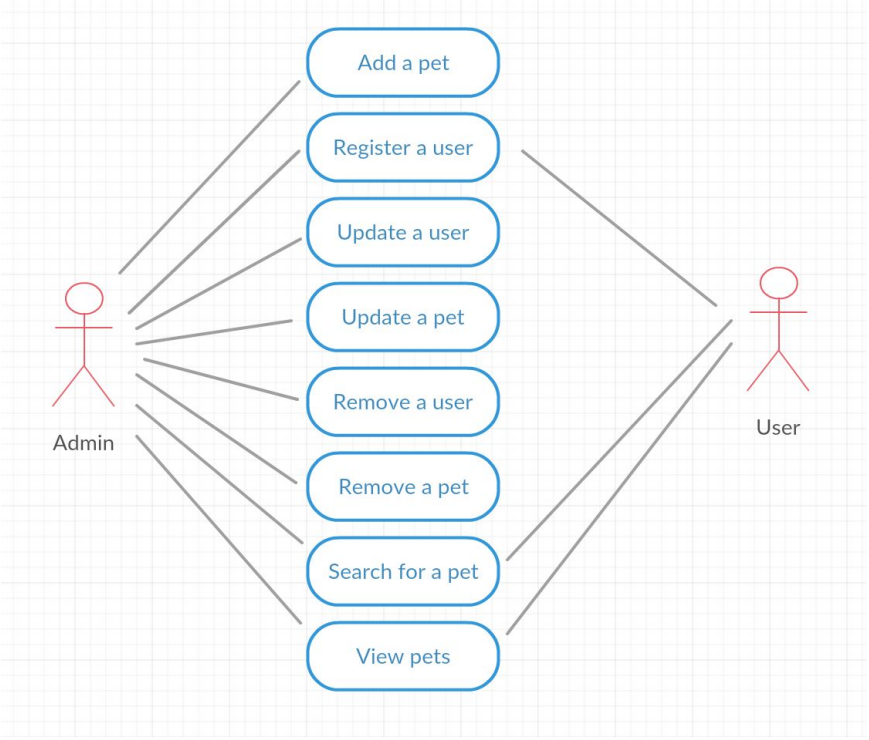
Here is a list of all our successful adoptions

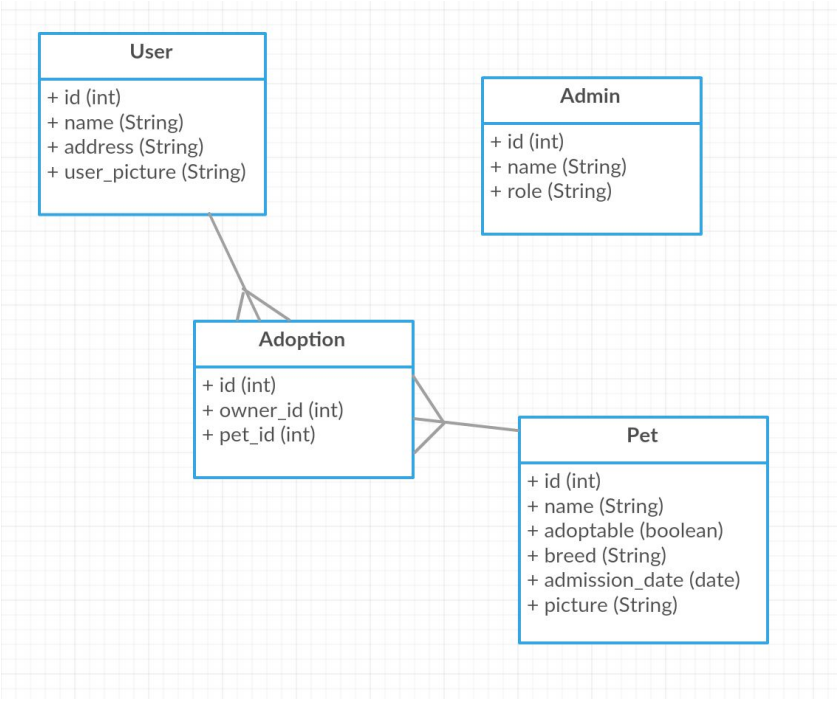
Douglas McKenzie has found a lovely home with Simon Anger!



Delete adoption? Delete

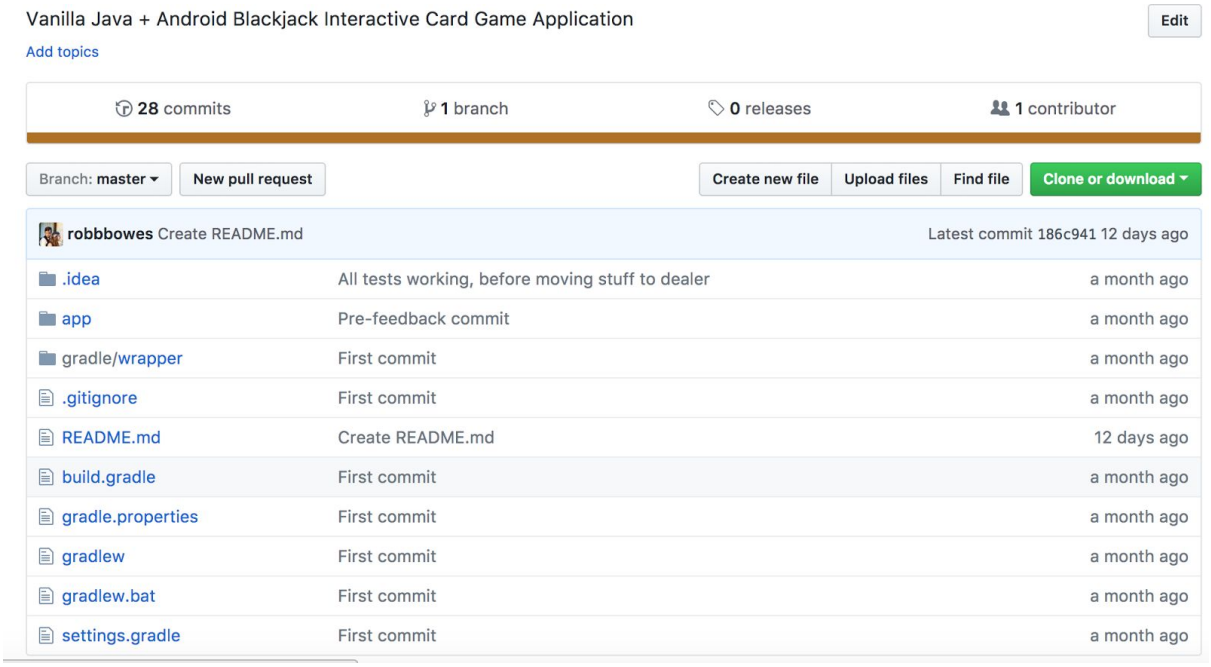
A & D - AD1


Add a pet
Register a user
Update a user
Update a pet
Remove a user
Remove a pet
Search for a pet
View pets
Admin
User

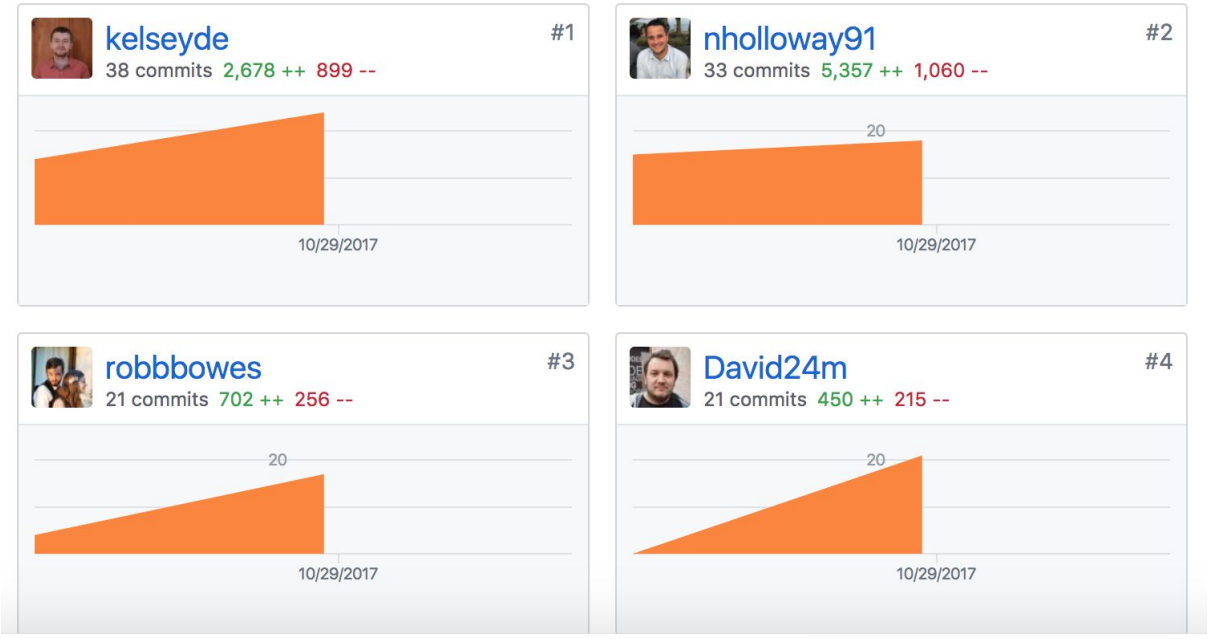

User
+ id (int)
+ name (String)
+ address (String)
+ user_picture (String)
Admin
+ id (int)
+ name (String)
+ role (String)
Adoption
+ id (int)
+ owner_id (int)
+ pet_id (int)
Pet
+ id (int)
+ name (String)
+ adoptable (boolean)
+ breed (String)
+ admission_date (date)
+ picture (String)

P 11

https://github.com/robbbowes/Java_Android_Blackjack



P 1



P 2

- **SPORTS DASHBOARD**

- Sports fans want to be able to view relevant sporting events on a dashboard. With a sport of your choice, use an existing API or create a new API to display information about fixtures, news and travel information for events.

- MVP: 1) Display upcoming events on a map 2) Display results and ranking of players/ teams 3) Allow users to add events to a favourites list

- **ROUTE PLANNER**

- Visit Scotland are look for ways to encourage people to walk and cycle. Your task is to create an app that allows users to search for cycling and hiking routes, view routes on a map, save routes to a wish list and mark a route done.

- MVP: 1) Select start and finish locations for their route 2) Save routes to a wish list 3) Mark completed routes as 'done'

P3