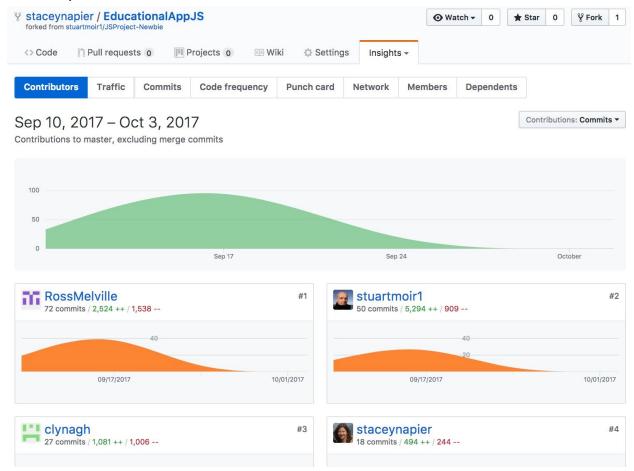
Stacey Napier Project Evidence

P1 - Group GitHub



P2 - Project Brief

Create an online educational tool which is fun and interactive which will assists the user in understanding programming principles.

The app should allow the user to search for keywords that they are looking to have a greater understanding of.

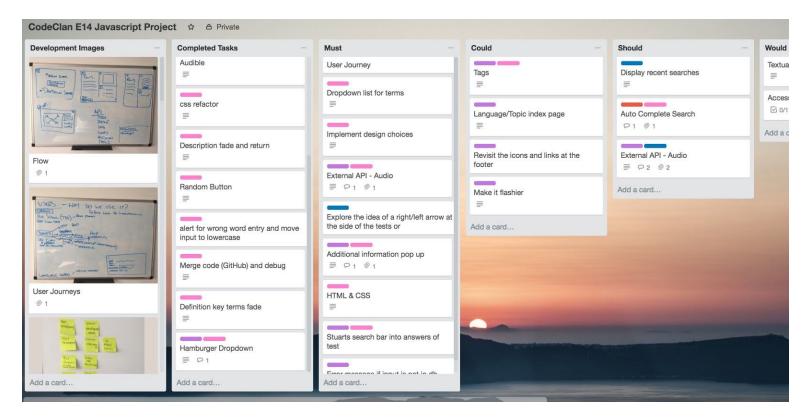
The search should provide the user with a definition of the subject and subsequent options to allow them to further their learning.

MVP

Ability to search db and get definition.

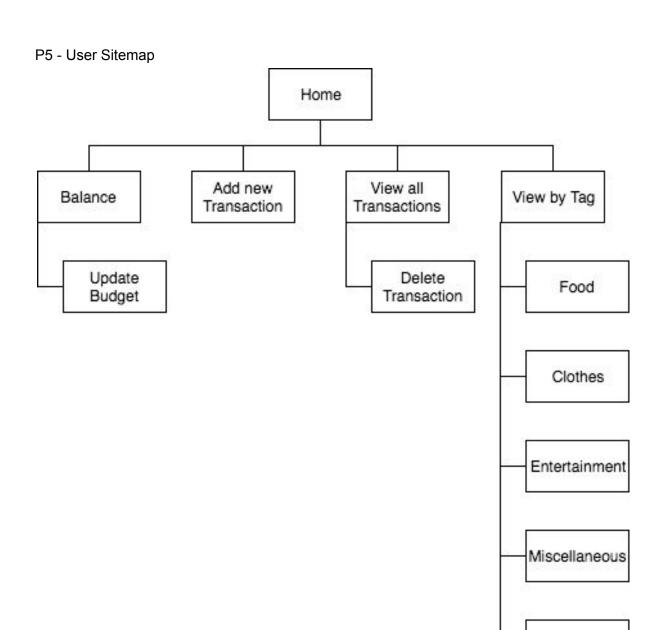
User activity by interactive options.

P3 - Planning



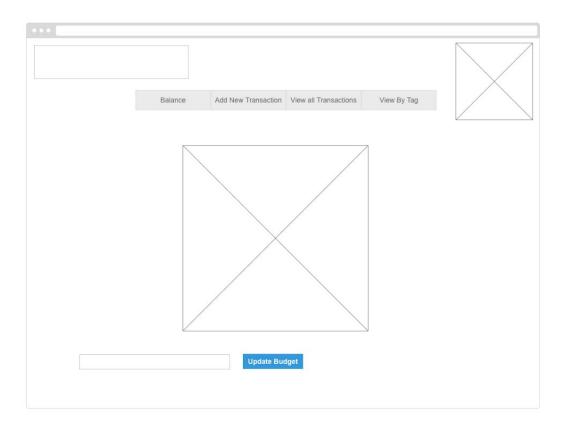
P4 - Acceptance Criteria

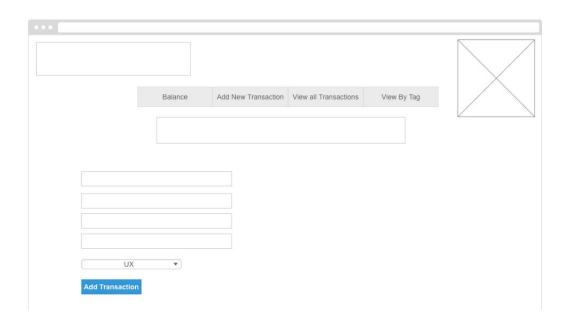
Acceptance Criteria	Expected Result/Output	Pass/Fail	
A user is able to search for a particular keyword	Word is displayed	Pass	
A user is able to use a menu to view list of keywords	Menu displays showing keywords	Pass	
A user is able to check their understanding through an interactive test.	User should have to input data which is checked and confirmed if correct	Pass	
A user can view more information about a word	A button press will present further information in a pop up	Pass	



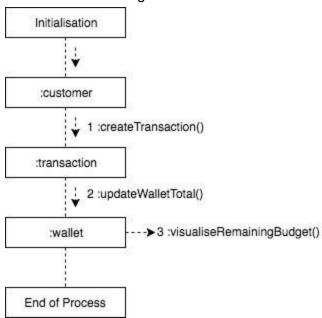
Bills

P6 - Wireframe

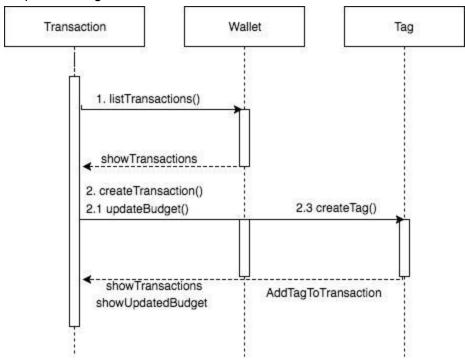




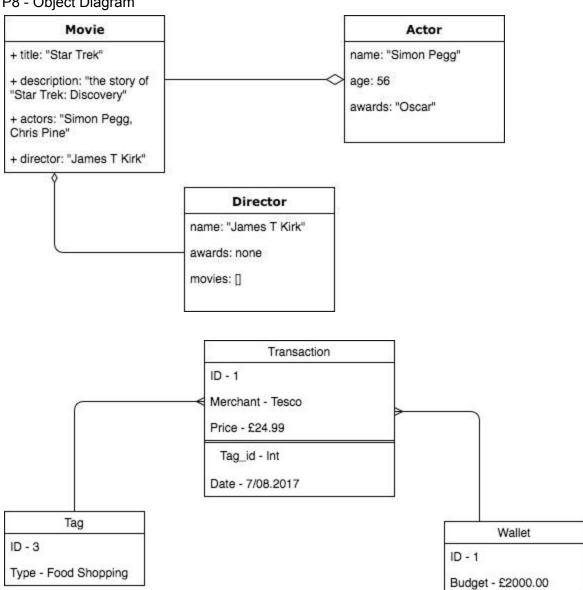
P7 Collaboration Diagram



Sequence Diagram



P8 - Object Diagram



```
render() {
let nodeToDisplay = {}
    nodeToDisplay = <PropList</pre>
      properties={this.state.filteredProperties}
      handlePropClick={this.handlePropClick}
      handleFilterClick={this.handleFilterClick}
    (this.state.selectedProperty !== null) {
    nodeToDisplay = <Details</pre>
      property={this.state.selectedProperty}
      images={this.state.images}
      className="animated fadeInUpBig"/>
  } else
   nodeToDisplay = <PropList</pre>
     properties={this.state.properties}
     handlePropClick={this.handlePropClick}
      handleFilterClick={this.handleFilterClick}
   <main className="App">
      <section className="main-content">
          { nodeToDisplay }
      </section>
     <footer className="footer">
       <Footer/>
     </footer>
   </main>
```

I chose the above algorithm to help determine which page should be displayed in the browser. The algorithm checks the state held in the constructor and selects which component is to be rendered to the browser.

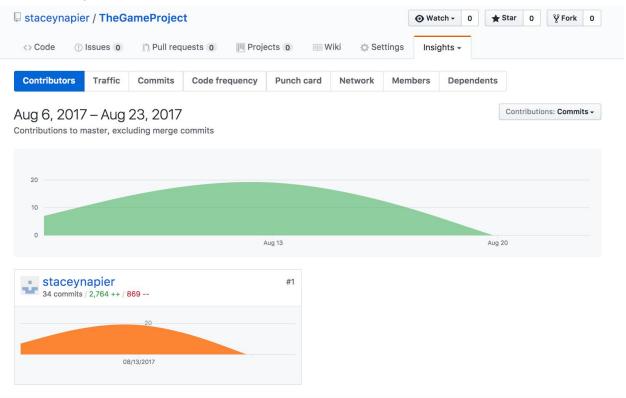
```
public class Game implements Serializable{
   private ArrayList<Clue> list;
   private Random random = new Random();
   public Game() {
       list = new ArrayList<Clue>();
   public void addClue(Clue clue) {
       list.add(clue);
   public ArrayList<Clue> getList() {
       return new ArrayList<Clue>(list);
   public Clue getAnswerAtIndex(int index){
       return list.get(index);
   }
   public Clue getRandomClue() {
       Random rand = new Random();
       int listSize = getLength();
       int index = rand.nextInt(listSize);
        return getAnswerAtIndex(index);
```

The above 'getRandomClue' algorithm was used as the app I created needed to randomly select a clue from an array of clues. This was to be presented on screen as part of a game. To get the random clue, I needed to get the length of the array, choose a number at random that is less than the length and then apply this to the array using the 'getAnswerAtIndex' function. This algorithm was used as Java doesn't offer built in functions like Ruby or Javascript to choose an item at random.

P10 - Pseudocode

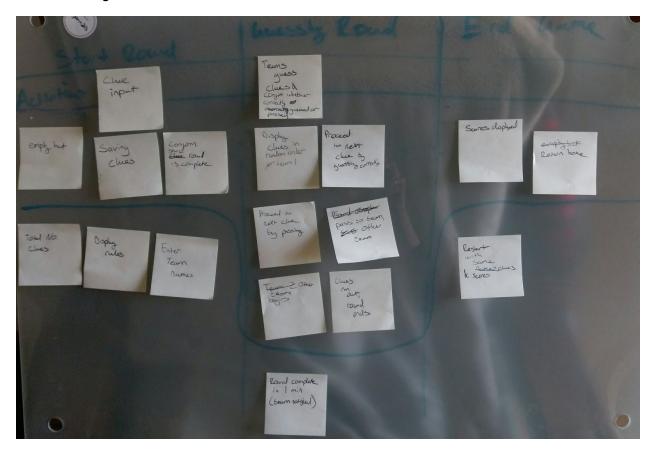
```
def self.find_all
  #select all from the tags table in the database
  # run the sql runner
  # return the results in ruby by mapping the array.
  sql = "SELECT * FROM tags";
  tags = SqlRunner.run(sql)
  results = tags.map { | tag| Tag.new(tag) }
  return results
end
```

P11 Solo Project



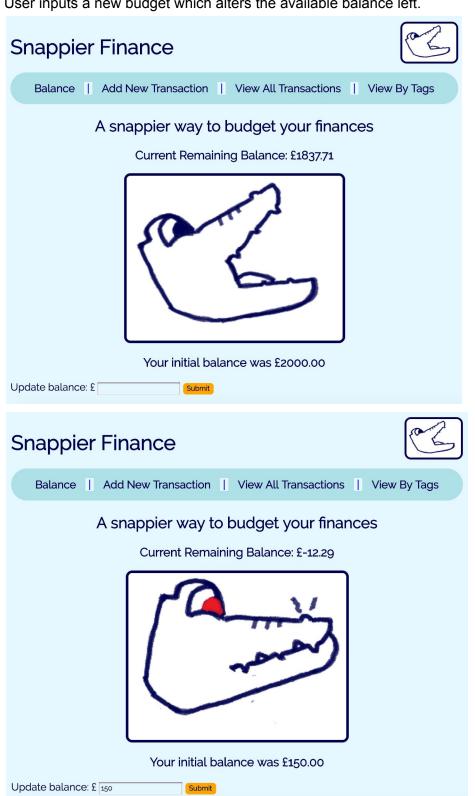
https://github.com/staceynapier/TheGameProject

P12 - Planning



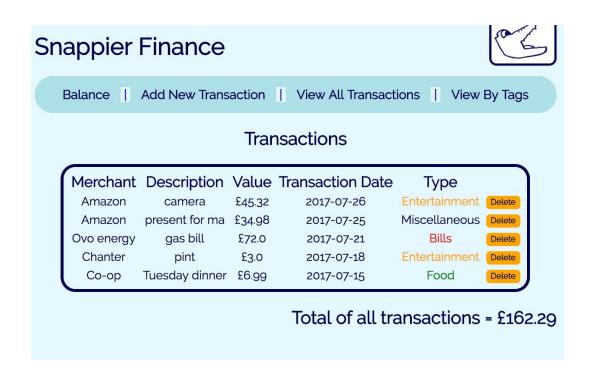
The image above indicates a planning session, in which I noted down all of the steps that would be required for the game to work. From here, I was able to establish which steps were necessary for the MVP - indicated by the blue line.

P13
User inputs a new budget which alters the available balance left.

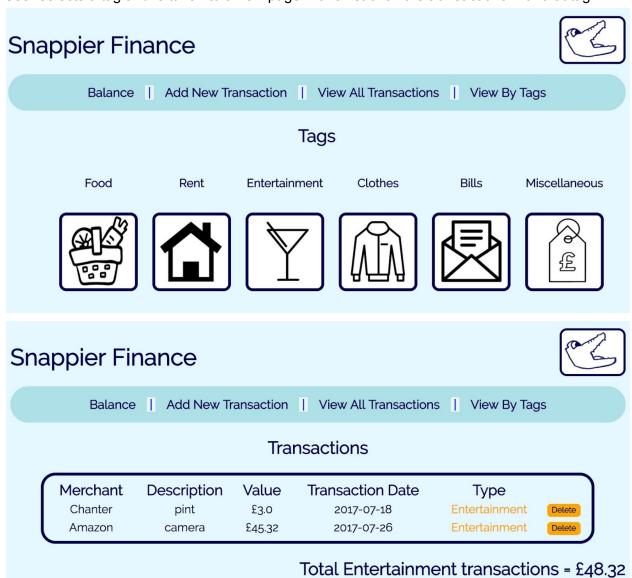


P14
User inputs new transaction details. Showing all transactions confirms transaction saved in the database.





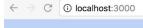
P 15
User selects a tag and is taken to a new page with a list of all the transactions with that tag.



Total of all transactions = £162.29

P16 API

```
var app = function(){
  var url = 'https://api.giphy.com/v1/gifs/trending?api key=77f26d5aac2243618618a35dee280226&limit=25&rating=6';
  makeRequest(url, requestComplete);
var makeRequest = function(url, callback){
  var request = new XMLHttpRequest();
  request.open('GET', url);
  request.addEventListener('load', callback);
var makeSearchRequest = function(callback) {
  var searchData = document.getElementById("input").value;
  var apiUrl = 'https://api.giphy.com/v1/gifs/search?api_key=77f26d5aac2243618618a35dee280226&q='
   + searchData + '&limit=5&offset=0&rating=G&lang=en';
  var request = new XMLHttpRequest();
  request.open('GET', apiUrl);
  console.log(apiUrl);
  request.addEventListener('load', callback);
var requestComplete = function(){
  console.log("Request Successfully Completed!");
  if(this.status !== 200) return;
  var gifs = JSON.parse(jsonString);
  console.log(gifs.data);
  localStorage.setItem('gifs', gifs.data);
  loopThrough(gifs.data);
```



Gif Finder

Enter keywords below to search







P17 Bug Tracking Report

Bug		Fix	
Footer disappears from main page when scrolling	Fail	Amended CSS to ensure the footer 'sticks' to the page ad is now on show permanently	Pass
Content doesn't respond to different screen sizes	Fail	Created flexbox container and changed font size from 'px' to 'em' to respond appropriately	Pass
Filter can only check by one item, should be able to filter by price and number of bedrooms	Fail	Amended logic to check both before presenting the filtered list	Pass
Unable to view all images that are linked to each property	Fail	Amended database and added image table which is connected to the property by id	Pass
Unable to get all relevant information in one xml request	Fail	Amended the property controller to automatically bring back all linked images in the same xml request	Pass

P18 Testing

Test code

```
public class GameTest {
    Game game;
    @Before
    public void before(){
       Clue clue = new Clue("Donald Trump");
        Clue clue1 = new Clue("Theresa May");
       Clue clue2 = new Clue("Kim Jong Un");
        game = new Game();
        game.addClue(clue);
        game.addClue(clue1);
        game.addClue(clue2);
   public void hasList() { assertEquals(2, game.getList().size()); }
    @Test
   public void testLength() { assertEquals((Integer)2, game.getLength()); }
    public void canEmptyList(){
       game.empty();
        assertEquals(1, game.getList().size());
```

Tests failing

```
6 tests done: 5 failed - 75ms
 "/Applications/Android Studio.app/Contents/jre/jdk/Contents/Home/bin/java" ...
 java.lang.AssertionError:
 Expected:1
 Actual
          :2
   <Click to see difference>

    Internal calls>

     at org.junit.Assert.failNotEquals(Assert.java:834) <2 internal calls>
     at com.example.user.thegame.GameTest.canRemoveAtIndex(<a href="GameTest.java:69">GameTest.java:69</a>) <28 internal calls>
 java.lang.AssertionError:
 Expected:2
 Actual :3
   <Click to see difference>

± <1 internal calls>

     at org.junit.Assert.failNotEquals(Assert.java:834) <2 internal calls>
      at com.example.user.thegame.GameTest.hasList(<u>GameTest.java:34</u>) <28 internal calls>
```

```
Code after changes
```

```
public class GameTest {
   Game game;
   @Before
   public void before(){
       Clue clue = new Clue("Donald Trump");
       Clue clue1 = new Clue("Theresa May");
       Clue clue2 = new Clue("Kim Jong Un");
        game = new Game();
        game.addClue(clue);
        game.addClue(clue1);
       game.addClue(clue2);
   }
   public void hasList() { assertEquals(3, game.getList().size()); }
   @Test
   public void testLength() { assertEquals((Integer)3, game.getLength()); }
   @Test
   public void canEmptyList(){
        game.empty();
       assertEquals(0, game.getList().size());
   }
   @Test
   public void canGetAnswerAtIndex(){
       Clue result = game.getAnswerAtIndex(1);
       assertEquals("Theresa May", result.getName());
   }
   @Test
   public void canGetRandomClue() { assertNotNull(game.getRandomClue()); }
```

Tests passing

```
"/Applications/Android Studio.app/Contents/jre/jdk/Contents/Home/bin/java" ...

Process finished with exit code 0
```