

## **aMAZEingGames Milestone 5 Project Testing:**

Parker Eischen  
Maria 'Sol' Pazos  
Adam Casey  
Justin Velvick  
Vladimir Zhdanov  
Chelsea Buchler

aMAZEingGames

### **User Acceptance Plans:**

**Game Testing** - Games are being tested Jasmine.js to test bugs involving game mechanics via automated testing. We play test each of the games multiple times each using different strategies to break the program. Including hitting random keys, replaying instead of submitting, leaving the game running rather than playing to completion etc.

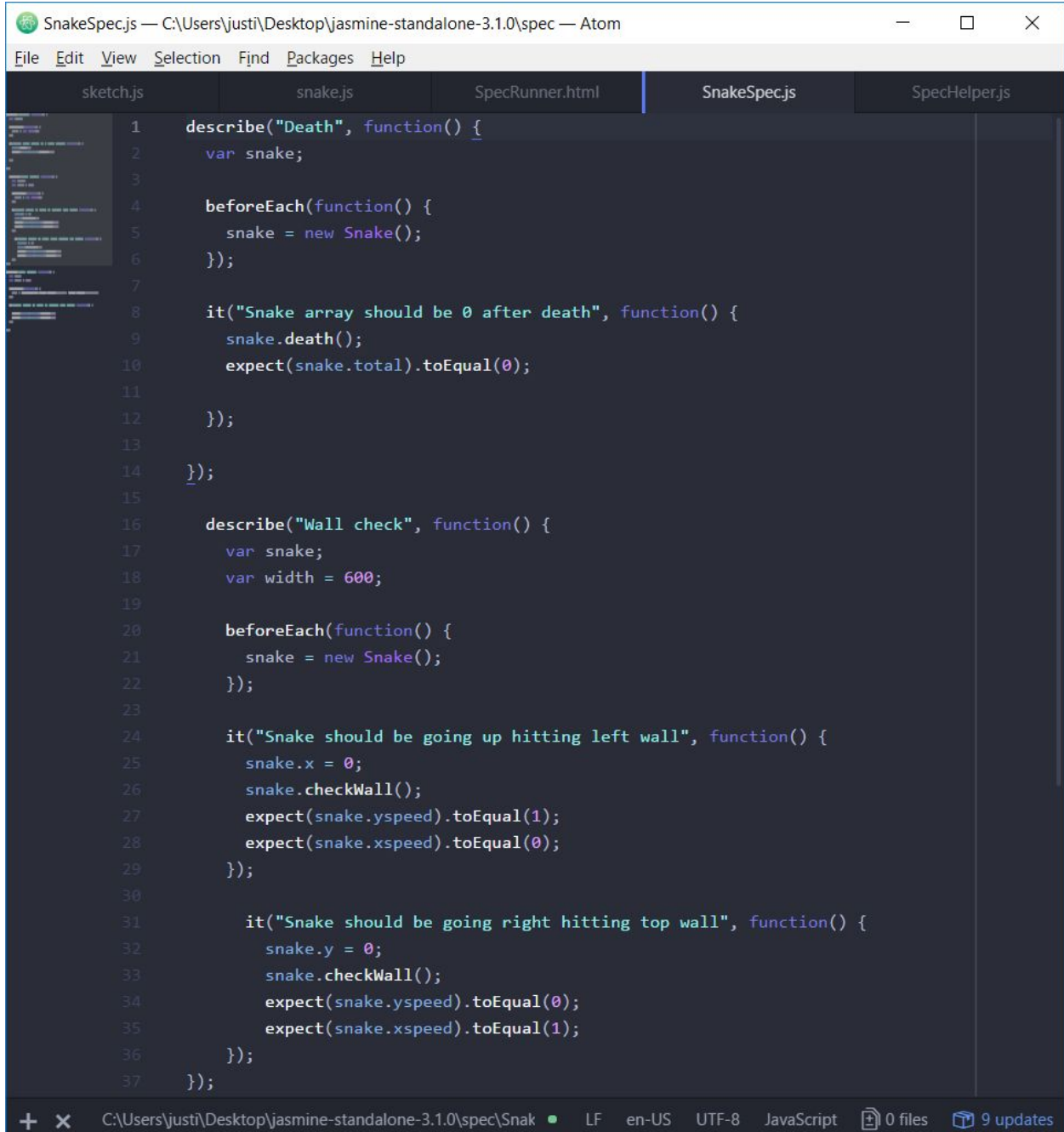
**Webpage Testing** - We test the webpage in a very similar way, mostly by making sure all of the hyperlinks go to their desired destination. Mostly using play testing from each of us to try to find bugs/break the website. Testing the resizing of the web page to see if everything is still in their proper position.

**Login Testing** - The login system has built in tests already as being part of a .js prebuilt function. This includes requiring valid characters only, requesting uppercase/special characters in a password ect. Also making sure that the username already exists before creating the new login. Each password is also hashed with mp5 in order for us to not know our user's passwords. There shouldn't be additional testing needed for this aspect of our software as the testing has been built in through restrictions.

**Automated Tests** - Jasmine.js provides a framework for Spec files. There are three describe functions which have "it" statements describing how "it" should work. There are expect statements inside the it statements which expect a certain result. Screenshots are below. We call certain functions inside the it statements and set up an expect statement checking for a specific change to the snake object.

**UAT** - Trying to break the games through obscure movements/ inputs. Break the webpage through clicking hyperlinks in an orthodox order to see if there are any failures. Registration testing, using unique characters to try and gain access to the login system. Try mysql commands in the registration fields. Sending our code to friends not in our group gives an

unbiased testing from someone who will just try to play the game not knowing how the code works.



The screenshot shows an Atom editor window with the title bar "SnakeSpec.js — C:\Users\justi\Desktop\jasmine-standalone-3.1.0\spec — Atom". The menu bar includes "File", "Edit", "View", "Selection", "Find", "Packages", and "Help". The tab bar shows five tabs: "sketch.js", "snake.js", "SpecRunner.html", "SnakeSpec.js" (which is the active tab), and "SpecHelper.js". The main editor area displays the following JavaScript code:

```
1 describe("Death", function() {
2     var snake;
3
4     beforeEach(function() {
5         snake = new Snake();
6     });
7
8     it("Snake array should be 0 after death", function() {
9         snake.death();
10        expect(snake.total).toEqual(0);
11
12    });
13
14 });
15
16 describe("Wall check", function() {
17     var snake;
18     var width = 600;
19
20     beforeEach(function() {
21         snake = new Snake();
22     });
23
24     it("Snake should be going up hitting left wall", function() {
25         snake.x = 0;
26         snake.checkWall();
27         expect(snake.yspeed).toEqual(1);
28         expect(snake.xspeed).toEqual(0);
29     });
30
31     it("Snake should be going right hitting top wall", function() {
32         snake.y = 0;
33         snake.checkWall();
34         expect(snake.yspeed).toEqual(0);
35         expect(snake.xspeed).toEqual(1);
36     });
37 });
```

The status bar at the bottom shows icons for a new file, close, and search, followed by the file path "C:\Users\justi\Desktop\jasmine-standalone-3.1.0\spec\Snak", encoding "LF", language "en-US", font size "UTF-8", "JavaScript", "0 files", and "9 updates".

