

Cookbook.com

## Revature Group 1 - Project 2

# Project Overview: Description

- A website that users can look up recipes for meals on, and if they create an account can save recipes for later. They can look up specific recipes by keyword, or they can click a button that presents them a random recipe. Recipe information includes the name of the recipe, ingredients required, steps required and a small picture accompanying it. Users that are logged on may also like other recipes, add recipes to their cookbooks and follow other users or cookbooks. Users may also create their own recipes.

# Project Overview: User Stories

- As an anonymous user, I want to be able to...
  - Search for recipes (optionally by ingredient, type, area, prep time)
  - Look up random recipes
- As a logged in user, I want to be able to...
  - Save meals to my account
  - Create my own recipe
  - Follow other users
  - Leave a review on other recipes

# Project Overview: MVP

- Searching recipes with optional filters
- Creating and storing users
  - Register yourself as a new user
  - Login
  - Usernames should be hashed
  - Passwords should be salted and hashed
- Random meal button

# Project Overview: MVP Cont.

- When showing recipes
  - Show thumbnail of meal
  - Show ingredients included
  - Show steps in recipe
- Ability for users to create different “cookbooks”
- Ability for users to add recipes to their “cookbooks”

# Project Overview: Stretch Goals

- Users can like recipes
- Ability for users to follow other users
- Ability for users to follow different “cookbooks”
- Users can leave a review for recipes
- Ability for users to download recipes
- Ability for users to create new recipes

# Project Overview: Concept Pages

## Main/Welcome Page

The Main/Welcome Page features a top navigation bar with a user profile icon and a dropdown menu containing 'Profile settings', 'Cookbooks', and 'Sign out'. A large search bar is positioned to the right of the navigation bar. Below the search bar, there are filter buttons for 'Category', 'Area', and 'Tags'. A 'Featured Recipes' section is located below the filters, displaying three recipe cards. Each card consists of a placeholder for a 'PICTURE OF FOOD', a 'Title: Food name' field, and a 'Description' field.

## Login Page

The Login Page features a central blue login form with a 'Username' field, a 'Password' field (masked with asterisks), and 'Sign up' and 'Login in' buttons. The background is a grid of yellow and red squares, with the word 'Food' and 'FOOD PICTURE' text overlaid on some squares.

## Recipe Page

The Recipe Page features a top navigation bar with a user profile icon and a dropdown menu containing 'Profile Settings', 'Cookbooks', and 'Sign out'. A large search bar is positioned to the right of the navigation bar. Below the search bar, there are filter buttons for 'Category', 'Area', and 'Tags'. The main content area displays a recipe card with a 'Recipe name' title, a placeholder for a recipe image, and a 'By: Author name here' field. The recipe card also includes a list of 'Ingredients', a 'Time' section, and a 'Steps' section. The recipe card is highlighted with a green border.

# Project Overview: Concept Pages Cont.

## Profile Page

The Profile Page mockup features a top navigation bar with a user profile dropdown (containing 'Profile Settings', 'Cookbooks', and 'Sign out'), a 'Logo' button, and a 'Search' button. Below the navigation bar is a filter section with 'Filter:' and three dropdown menus for 'Category', 'Area', and 'Tags'. The main content area includes a circular placeholder for 'Your profile picture here', a 'Your username' header, a 'Description' text area, and 'Name' and 'Location' input fields. Below this are two 'Cookbook' entries, each with a 'FOOD PICTURE' placeholder, a title, a 'Description' text area, and 'Display # likes' and 'Display # followers' buttons.

## Cookbook Page

The Cookbook Page mockup features a top navigation bar with a user profile dropdown (containing 'Profile Settings', 'Cookbooks', and 'Sign out'), a 'Logo' button, and a 'Search' button. Below the navigation bar is a filter section with 'Filter:' and three dropdown menus for 'Category', 'Area', and 'Tags'. The main content area includes a 'Cookbook picture' placeholder, a 'Cookbook 1' header, a 'Description' text area, and 'Display # likes' and 'Display # followers' buttons. Below this are five 'Recipe' entries, each with a 'Recipe name' header, a 'Description' text area, and 'Display # likes' and 'Display # followers' buttons.

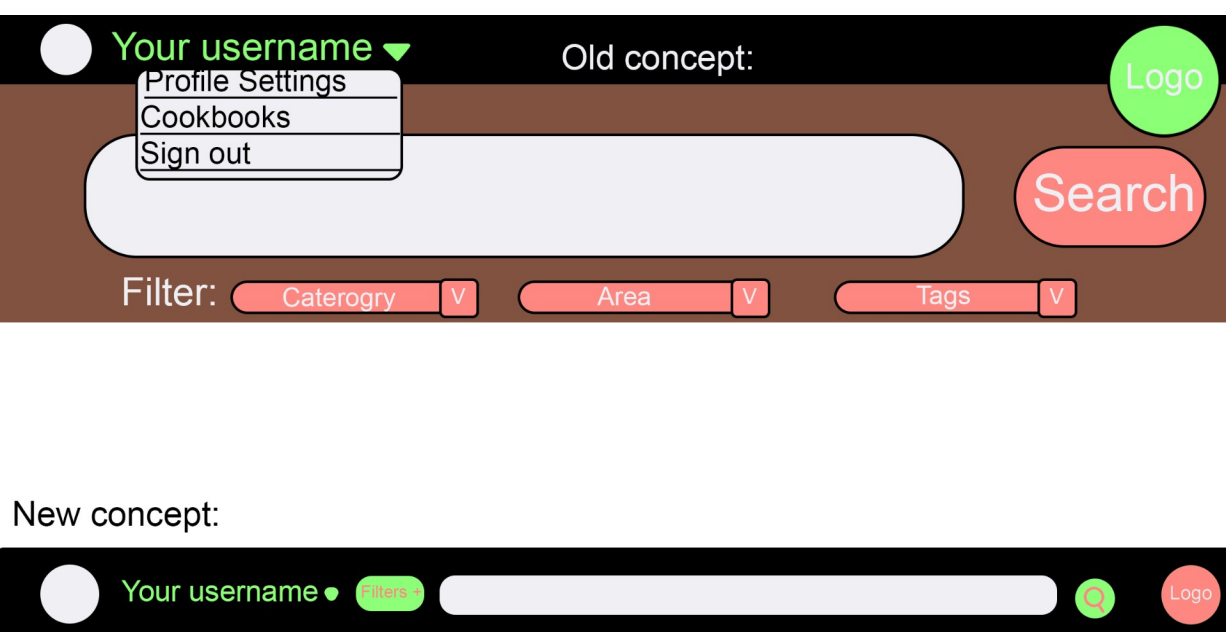
## Search Results Page

The Search Results Page mockup features a top navigation bar with a user profile dropdown (containing 'Profile Settings', 'Cookbooks', and 'Sign out'), a 'Logo' button, and a 'Search' button. Below the navigation bar is a filter section with 'Filter:' and three dropdown menus for 'Category', 'Area', and 'Tags'. The main content area includes a 'Your search result: Alfredo Pasta' header, a 'Sort by: Relevance' dropdown, and a 'Result view: Detailed view' dropdown. Below this are three 'Alfredo pasta 1' entries, each with a 'Food picture' placeholder, a title, a 'Description' text area, and 'Display # likes' and 'Display # followers' buttons. A red button is located at the bottom right.

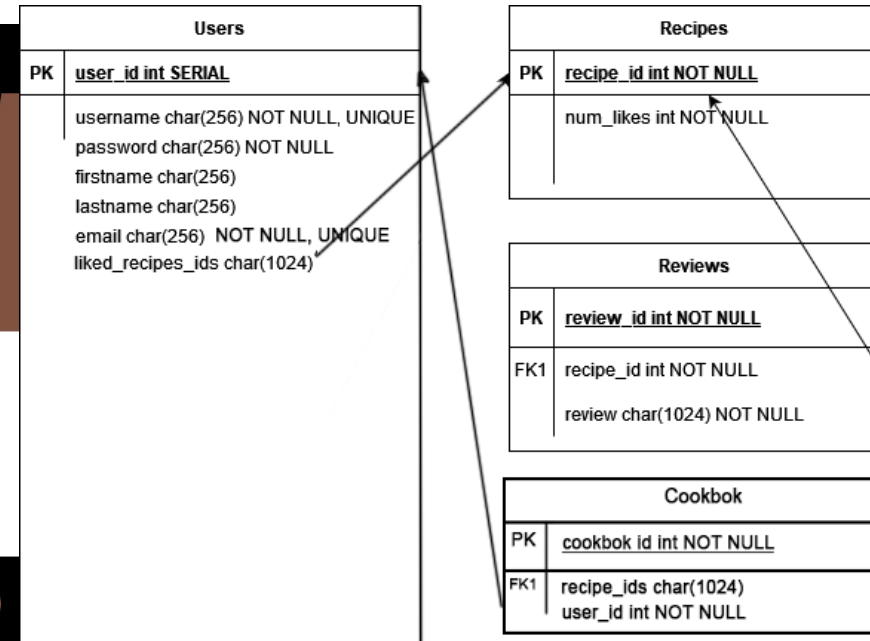


# Project Overview: Concept Pages Cont.

## Navbar Alternative



## Database Tables



# Technologies Used: Backend

- Spring Framework, Spring Boot, Web
- Hibernate
- Logback
- Maven
- Junit5 (testing)
- Mockito (testing)
- H2 Database (testing)

# Technologies Used: Frontend

- Angular/NodeJS
- Bulma
- MealDB (external API)
- Cucumber
- Selenium

# Technologies Used: Project Management

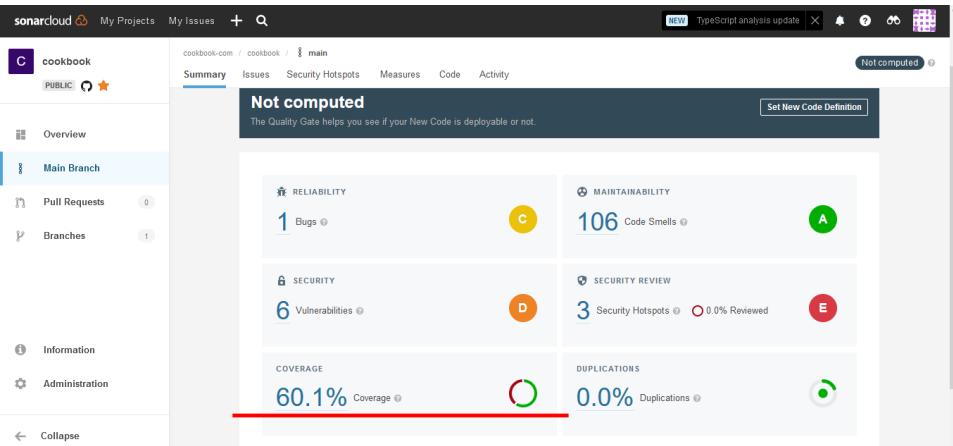
- AWS RDS
- AWS EC2
- Git
- SonarCloud

# Design/Development Philosophies

- Behavior/Test Driven Development
- Scrum
- RESTful Web Service Design
- 3-Tiered architecture

# Unit Tests and Code Coverage

## SonarCloud Stats



Project Overview			
Reliability			
Security			
Security Review			
Maintainability			
Coverage			
Overview			
Overall			
Coverage	60.1%		
Lines to Cover	333		
Uncovered Lines	126		
Line Coverage	62.2%		
Conditions to Cover	116		
Uncovered Conditions	53		
Condition Coverage	54.3%		
Tests			
Unit Tests	48		

	Coverage	Uncovered Lines	Uncovered Conditions
src/main/java/com/revature/cookbook/dto/LoginDTO.java	0.0%	21	10
src/main/java/com/revature/cookbook/exception/UserNotFoundException.java	0.0%	10	—
src/main/java/com/revature/cookbook/controller/AuthenticationController.java	4.8%	16	4
src/main/java/com/revature/cookbook/controller/CookbookController.java	10.0%	18	—
src/main/java/com/revature/cookbook/controller/UserController.java	18.2%	9	—
src/main/java/com/revature/cookbook/CookbookApplication.java	33.3%	2	—
src/main/java/com/revature/cookbook/model/User.java	35.9%	27	23
src/main/java/com/revature/cookbook/model/Cookbook.java	57.6%	17	8
src/main/java/com/revature/cookbook/service/UserService.java	93.1%	2	7
src/main/java/com/revature/cookbook/dao/UserDao.java	93.2%	3	0
src/main/java/com/revature/cookbook/service/CookbookService.java	93.3%	1	1

## Code Coverage

# Unit Tests

## Cookbook Data Access Layer Unit Tests

cookbook - cookbook/src/test/java/com/revature/cookbook/daounittests/CookbookDaoTests.java - Spring Tool Suite 4

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer JUnit x

Finished after 11.548 seconds

Runs: 4/4 Errors: 0 Failures: 0

CookbookDaoTests [Runner: JUnit 5] (4.970 s)

- createCookbookPositive() (0.418 s)
- getCookbookByIdNoCookbookWithIdNegative() (0.044 s)
- addRecipeToCookbookPositive() (0.020 s)
- getCookbookByIdPositive() (0.022 s)

```
1 package com.revature.cookbook.daounittests;
2
3 import javax.persistence.EntityManager;
4
15
16 @SpringBootTest
17 @DirtiesContext(classMode = ClassMode.AFTER
18 public class CookbookDaoTests {
19
20
21     @Autowired
22     private EntityManager em;
23
24     @Autowired
25     private CookbookDao cookbookDaoSut;
26
```

cookbook - cookbook/src/test/java/com/revature/cookbook/serviceunittests/CookbookServiceTests.java - Spring Tool Suite 4

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Package Explorer JUnit x

Finished after 16.461 seconds

Runs: 7/7 Errors: 0 Failures: 0

CookbookServiceTests [Runner: JUnit 5] (9.903 s)

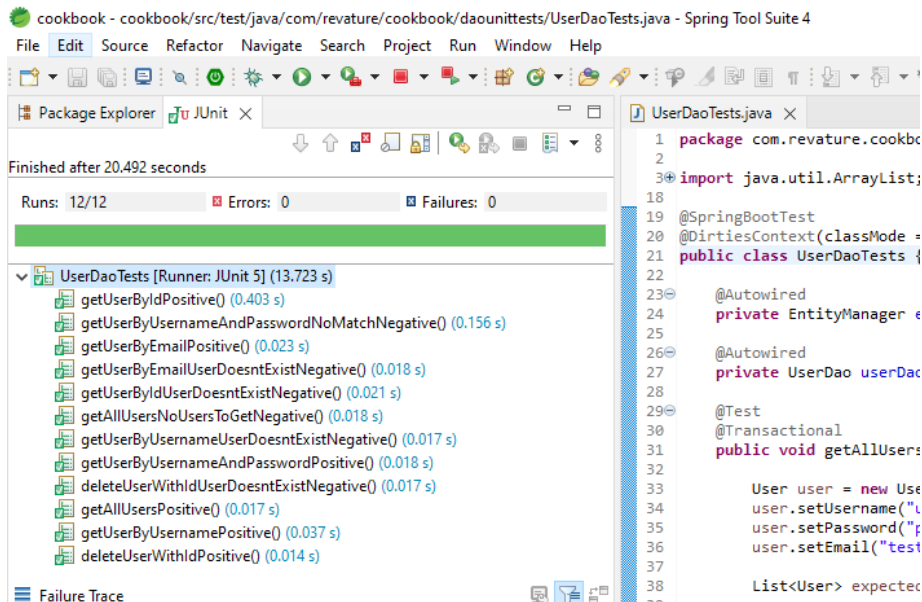
- addRecipeToCookbookCookbookDoesntExistNegative() (1.631 s)
- createCookbookNameTooLongNegative() (1.269 s)
- createCookbookPositive() (1.187 s)
- createCookbookUserDoesntExist() (1.474 s)
- getCookbookWithIdPositive() (1.599 s)
- addRecipeToCookbookPositive() (1.549 s)
- getCookbookWithIdCookbookDoesntExistNegative() (1.174 s)

```
1 package com.revature.cook
2
3 import static org.mockito
23
24 @SpringBootTest
25 @DirtiesContext(classMode
26 public class CookbookServ
27
28 @Mock
29 private CookbookDao c
30
31 @Mock
32 private UserDao userD
33
34 @InjectMocks
35 @Resource
36 private CookbookServ
37
38
39
```

## Cookbook Service Layer Unit Tests

# Unit Tests

## User Data Access Layer Unit Tests



cookbook - cookbook/src/test/java/com/revature/cookbook/daounittests/UserDaoTests.java - Spring Tool Suite 4

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Package Explorer JUnit x

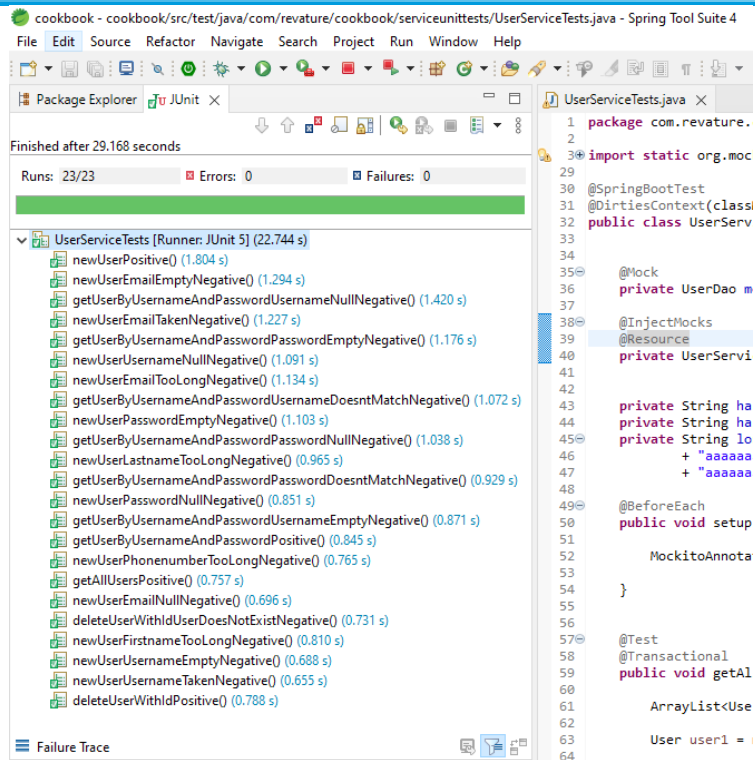
Finished after 20.492 seconds

Runs: 12/12 Errors: 0 Failures: 0

UserDaoTests [Runner: JUnit 5] (13.723 s)

- getUserByIdPositive() (0.403 s)
- getUserByUsernameAndPasswordNoMatchNegative() (0.156 s)
- getUserByEmailPositive() (0.023 s)
- getUserByEmailUserDoesntExistNegative() (0.018 s)
- getUserByIdUserDoesntExistNegative() (0.021 s)
- getAllUsersNoUsersToGetNegative() (0.018 s)
- getUserByUsernameUserDoesntExistNegative() (0.017 s)
- getUserByUsernameAndPasswordPositive() (0.018 s)
- deleteUserWithIdUserDoesntExistNegative() (0.017 s)
- getAllUsersPositive() (0.017 s)
- getUserByUsernamePositive() (0.037 s)
- deleteUserWithIdPositive() (0.014 s)

```
1 package com.revature.cookbook;
2
3 import java.util.ArrayList;
4
5 @SpringBootTest
6 @DirtiesContext(classMode = ClassMode.AFTER_CLASS)
7 public class UserDaoTests {
8
9     @Autowired
10     private EntityManager entityManager;
11
12     @Autowired
13     private UserDao userDao;
14
15     @Test
16     @Transactional
17     public void getAllUsers() {
18         User user = new User();
19         user.setUsername("test");
20         user.setPassword("test");
21         user.setEmail("test");
22         userDao.save(user);
23         List<User> expected = new ArrayList<>();
24         expected.add(user);
25         assertEquals("Expected 1 user", userDao.getAllUsers(), expected);
26     }
27 }
```



cookbook - cookbook/src/test/java/com/revature/cookbook/serviceunittests/UserServiceTests.java - Spring Tool Suite 4

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Package Explorer JUnit x

Finished after 29.168 seconds

Runs: 23/23 Errors: 0 Failures: 0

UserServiceTests [Runner: JUnit 5] (22.744 s)

- newUserPositive() (1.804 s)
- newUserEmailEmptyNegative() (1.294 s)
- getUserByUsernameAndPasswordUsernameNullNegative() (1.420 s)
- newUserEmailTakenNegative() (1.227 s)
- getUserByUsernameAndPasswordPasswordEmptyNegative() (1.176 s)
- newUsernameNullNegative() (1.091 s)
- newUserEmailTooLongNegative() (1.134 s)
- getUserByUsernameAndPasswordUsernameDoesntMatchNegative() (1.072 s)
- newUserPasswordEmptyNegative() (1.103 s)
- getUserByUsernameAndPasswordPasswordNullNegative() (1.038 s)
- newUserLastNameTooLongNegative() (0.965 s)
- getUserByUsernameAndPasswordPasswordDoesntMatchNegative() (0.929 s)
- newUserPasswordNullNegative() (0.851 s)
- getUserByUsernameAndPasswordUsernameEmptyNegative() (0.871 s)
- getUserByUsernameAndPasswordPositive() (0.845 s)
- newUserPhonenumberTooLongNegative() (0.765 s)
- getAllUsersPositive() (0.757 s)
- newUserEmailNullNegative() (0.696 s)
- deleteUserWithIdUserDoesNotExistNegative() (0.731 s)
- newUserFirstnameTooLongNegative() (0.810 s)
- newUserUsernameEmptyNegative() (0.688 s)
- newUserUsernameTakenNegative() (0.655 s)
- deleteUserWithIdPositive() (0.788 s)

```
1 package com.revature.cookbook;
2
3 import static org.mockito.Mockito.*;
4
5 @SpringBootTest
6 @DirtiesContext(classMode = ClassMode.AFTER_CLASS)
7 public class UserServiceTests {
8
9     @Mock
10     private UserDao userDao;
11
12     @InjectMocks
13     @Resource
14     private UserService userService;
15
16     private String hashedPassword;
17     private String login;
18     private String password;
19
20     @BeforeEach
21     public void setup() {
22         MockitoAnnotations.initMocks(this);
23     }
24
25     @Test
26     @Transactional
27     public void getAllUsers() {
28         ArrayList<User> expected = new ArrayList<>();
29         User user1 = new User();
30         user1.setUsername("test");
31         user1.setPassword("test");
32         user1.setEmail("test");
33         userDao.save(user1);
34         expected.add(user1);
35         assertEquals("Expected 1 user", userService.getAllUsers(), expected);
36     }
37 }
```

## User Service Layer Unit Tests



# End to End Testing

cookbook - E2E-testing/src/test/java/com/revature/features/TestRunner.java - Spring Tool Suite 4

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer JUnit x

Finished after 85.434 seconds

Runs: 31/31 Errors: 15 Failures: 0

- > Adding a recipe to a cookbook [Runner: JUnit 5] (4.224 s)
- ✓ Creating user [Runner: JUnit 5] (26.050 s)
  - ✓ Creating new user successfully (3.674 s)
  - ✓ Creating new user without firstname (10.598 s)
  - ✓ Creating new user without lastname (4.049 s)
  - ✓ Forgetting username (2.465 s)
  - ✓ Forgetting password (2.612 s)
  - ✓ Forgetting email (2.647 s)
- > Leaving a review for a recipe [Runner: JUnit 5] (1.649 s)
- > User likes a recipe [Runner: JUnit 5] (0.027 s)
- ✓ User logging in [Runner: JUnit 5] (15.074 s)
  - ✓ User login in successfully (2.963 s)
  - ✓ User inputs invalid username (4.186 s)
  - ✓ User inputs invalid password (3.436 s)
  - ✓ User leaves username blank (2.237 s)
  - ✓ User leaves password blank (2.251 s)
- ✓ Navbar navigation [Runner: JUnit 5] (21.479 s)
  - ✓ Navigating to login page (1.999 s)
  - ✗ Logging out (4.667 s)
  - ✓ Navigating to welcome page (7.331 s)
  - ✓ Navigating to the profile page (3.156 s)
  - ✓ Pressing the random recipe button (1.975 s)
  - ✓ Navigating to the signup page (2.350 s)
- > Random Recipe [Runner: JUnit 5] (2.800 s)
- > Searching recipes #Im just going to set these up to assure we actually get taken to

CookbookServiceTests.java Steps.j

```
1  
2 package com.revature.features;  
3  
4 import org.junit.runner.RunWith;  
10  
11 @CucumberOptions(monochrome =  
12  
13 @Cucumber  
14 public class TestRunner {  
15  
16  
17  
18 }
```

# Live Demo

- <http://ec2-18-117-174-173.us-east-2.compute.amazonaws.com:8082>