System and Unit Test Report Problematica Team Problematica 11/23/2016

System Test Scenarios:

Sprint 1 User stories completed:

1. As a newly-introduced user, I want to see an attractive and intuitive homepage UI when I visit the site for the first time, so that I am encouraged to continue using the site and am able to find links to get more information. (8sp) [total: 21 hours]

Scenario:

- 1. Type "https://problematica.herokuapp.com" into your browser and hit enter
- 2. Look around the website and enjoy the UI created by the developers
- 2. As a potential user, I would like the website to be hosted somewhere on the web, such as Heroku, so that I can access the site from anywhere. (5sp) [total: 2 hours]

Scenario:

- 1. Type "https://problematica.herokuapp.com" into your browser and hit enter
- 2. See that the site works and that it is hosted by heroku but it is in the URL
- 3. Try with other devices
- 3. As a Problematica developer, I want to be able to access a database to store information, so that the website is dynamic. (5sp) [total: 2 hours]

Scenario:

- 1. Type "https://www.heroku.com/postgres" into your browser and hit enter
- 2. Log into your heroku account (depends on which developer)
- 3. Obtain the login information of the database and use it to access the database using an external UI (such as Postico)
- 5. As a member of the Problematica organization, I need to be able to post problems on the site for people to solve from within the admin portal, so that other users can tackle them (3sp)

Scenario:

- 1. Type "https://www.heroku.com/postgres" into your browser and hit enter
- 2. Hit Login and type: email, password, hit Enter
- 3. Press Portal; Click on the New Problem Tab
- 4. Fill out every field and hit submit
- 5. Press the Problematica Icon to return to home page
- 6. Press the All topic in Topics and you'll find your posted problem there

Sprint 2 User stories completed:

Post Problems Portal As a member of a hosting institution, I need to be able to post problems on the site for people to solve from within a portal, so that the site's users can tackle them. (3 sp) [4 hours]
Scenario:

- 1. Type "https://www.heroku.com/postgres" into your browser and hit enter
- 2. Hit Login and type: email, password, hit Enter
- 3. Press Portal; Click on the New Problem Tab
- 4. Fill out every field and hit submit
- 5. Press the Problematica Icon to return to home page
- 6. Press the All topic in Topics and you'll find your posted problem there

Latex As hosting institution, I want to to able to use the LaTeX editor, so that I can
easily post problems. (8 sp) [3 hours]

Scenario:

- 1. While on the site, logged in as an institution account, press Portal
- 2. Select New Problem tab and fill in the Problem Text field in the form
- 3. Use \(\ Math here \) as format for the desired LaTeX code
- 4. Press submit when done with other fields

Profile Page As a member of the problem-solving community, I would like to be able to learn about the other individuals I am collaborating with, their reputation, and their accomplishments, by looking at their profile pages, so that I can judge them. (5 sp) [5 hours]

Scenario:

- 1. While on the site, type in the name of a person into the search bar
- 2. Looking at the results of the search, press on the name of a person
- 3. Read the profile of the person to find out more about them

Sign in/Sign up As a new user, I would like to be able to create an account on a
sign-up page and be able to login and logout, so that I am able to participate. (8sp)
[5.5 hours]

Scenario:

- 1. While on the site and not logged on, press sign up
- 2. Fill out all fields and press create account
- 3. At the top, press the logout button to log out
- 4. Also at the top, press the login button and fill in the required fields to login

Sprint 3 User stories completed:

Submit Solution As a problem-solver, I would like to be able to submit a solution, so that I have a chance at the bounty. (5 sp) [5 hours]

- 1. While on the site, press on any problem
- 2. On the problem page, press Submit Solution
- 3. Post a link to an article solution or a pdf solution, and leave a comment then press submit

Problem Page As a problem-solver, I want to see an individual page for the problem I am considering buying into, so that I can learn more information about the background and formulation of this problem. (5 sp) [4 hours]

Scenario:

- 1. While on the site, press on a problem or a topic and see the problems of that topic
- 2. On the problem page, press the different tabs such as Formulation, About, Why does it matter, and Update, to see different informations about the problem

Sorting As a scholar in a specific subject area, I want to be able to view only the problems that are relevant to me, so that I can more easily determine which problems I may want to work on. (8sp) [13 hours]

Scenario:

- 1. While on the home page, press Topic to view all the topics
- 2. Press the relevant topic to view relevant problems
- 3. Press all to see all the problems

Donate Money - As a person who wants to see a problem solved, I want to be able to donate money to the bounty, so that more people are encouraged to work on the problem (13sp) [15 hours]

Scenario:

- 1. While on the homepage, press on a problem that you want to donate to
- 2. Press the donate button and a text box will pop up asking for the amount
- 3. Enter the amount and then press donate
- 4. The next page will be a confirmation page and you will need to fill out info of your card to donate
- 5. After finishing, return to the problem page to see your donation and user profile listed under donators

Donor Recognition - As an egotistic person who has donated, I want recognition for the good that I have done for the common good, so that I can feel good about myself. (8sp) [13 hours]

Scenario:

- 1. Press on any problem that you have donated to on either the homepage or the topic list
- 2. Scroll down to see the graphic of the donators and hover your mouse over each profile to see more details, such as how much donated

Unit Tests:

Our unit tests are in models directory of our app. To reference it, you will need to use a specific url (https://problematica.herokuapp.com/testuserclass) and the result of the test will be printed in the console. Inside the code of the test, you can change the values of the input in order to test each method differently. These test files will also be in the Testing directory. There are some bugs with our classes and

methods so some test will not work and so they were commented out. Default.py in controller directory is where the calls to the test methods are.