TEAM BENZ
Project Requirements
March 5, 2018

Document overview

In this document, we begin by providing an update on the current state of the project and noting the changes made to the project. We then move to the project requirements section of the document. In the project requirements section we start with a product summary, describing the products features, audience, business benefits, needs met, and interface. We then move to provide a full description of all the interface requirements, functional requirements, and non-functional requirements of our product. Then we provide a comprehensive set of use cases and scenarios touching on all primary features provided by our product. We then provide a description of features set the team plans to implement in time for the final presentation April 10^{th}.

The project requirements section is followed by a preliminary acceptance testing plan. In which, we provide an outline of the planned approach we intend to follow to test the final product. We first provide a general outline of the plan, and then provide a preliminary timeline for testing, bug fixes and retesting in a table. We then provide the different test environments we will be testing in, description of tests, and application of such tests. We also describe the intended testing environment, tools, and processes we will use for our tests. We close off by listing all the features and requirements we plan on testing and proving a list of preliminary ideas of how we intend on testing those requirements.

Project Update

The interface and features were updated to reflect refined scope of project now that we have better understanding of team competences, time constraints, and after information gathered from users. The final list of features and updated interface are provided within the project requirements section bellow.

Project Requirements

Product summary:

The product is a web-service that allows users to create and share their ideas publicly to find any necessary skills and resources required to put an idea into action. The idea is shared within individuals on a university campus, initially on VIU's Nanaimo campus, a university campus where skills, ideas, and passion are only ten minutes apart on a given day. Other parties can then get into contact with the idea owner and pledge to contribute accordingly. This will grant personal ideas all necessary material and skill through collaboration.

Product features:

- Share ideas: Helps idea owners get their ideas out, to get necessary skills and resources required to put an idea into action.
- Browse ideas (connect with idea owner): Provide the public with a list of ideas they can contribute to.

Audience:

The target audience is students, professors, and the local community surrounding a university.

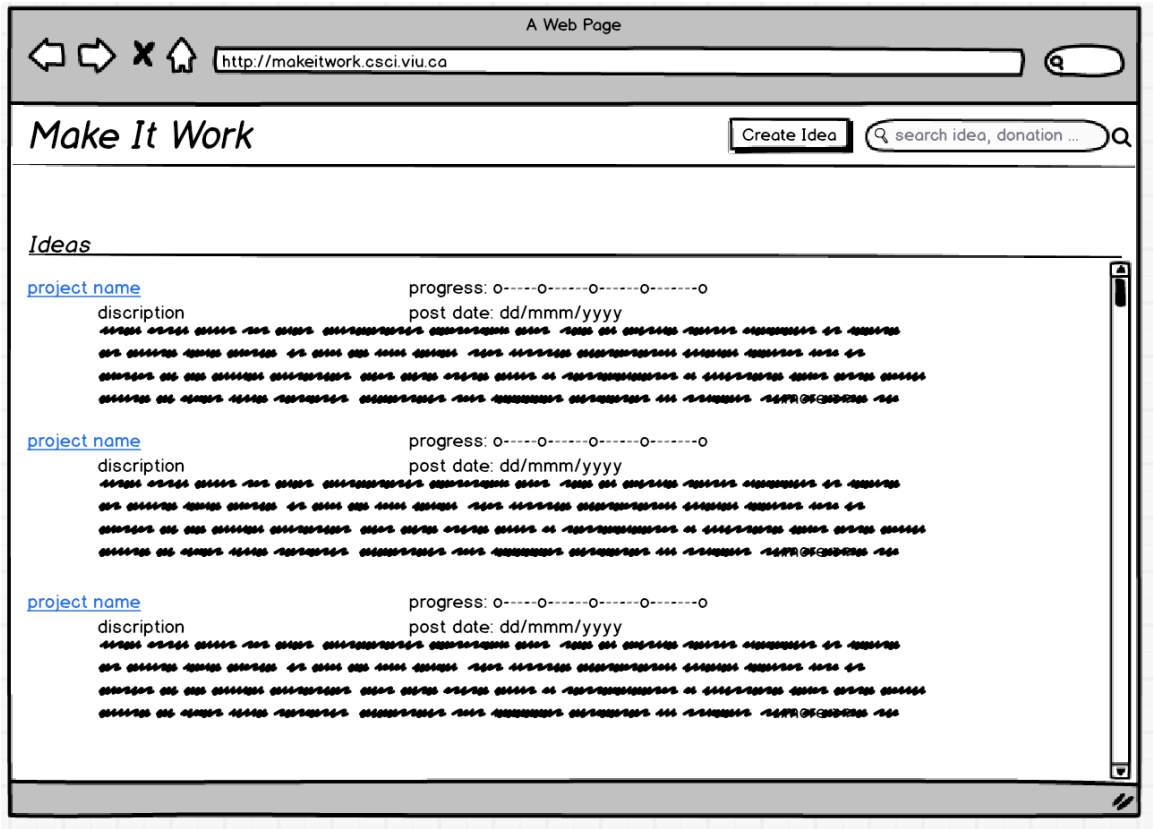
Business needs met by the product:

The primary benefit our project offers to our target audience is the ability to get a project finished that they wouldn't be able to otherwise finish on their own, by connecting them to others that are welling to contribute the necessary skills and resources required. Additionally, it allows users to support new ideas and gain experience through collaboration.

General Interface:

Main page:

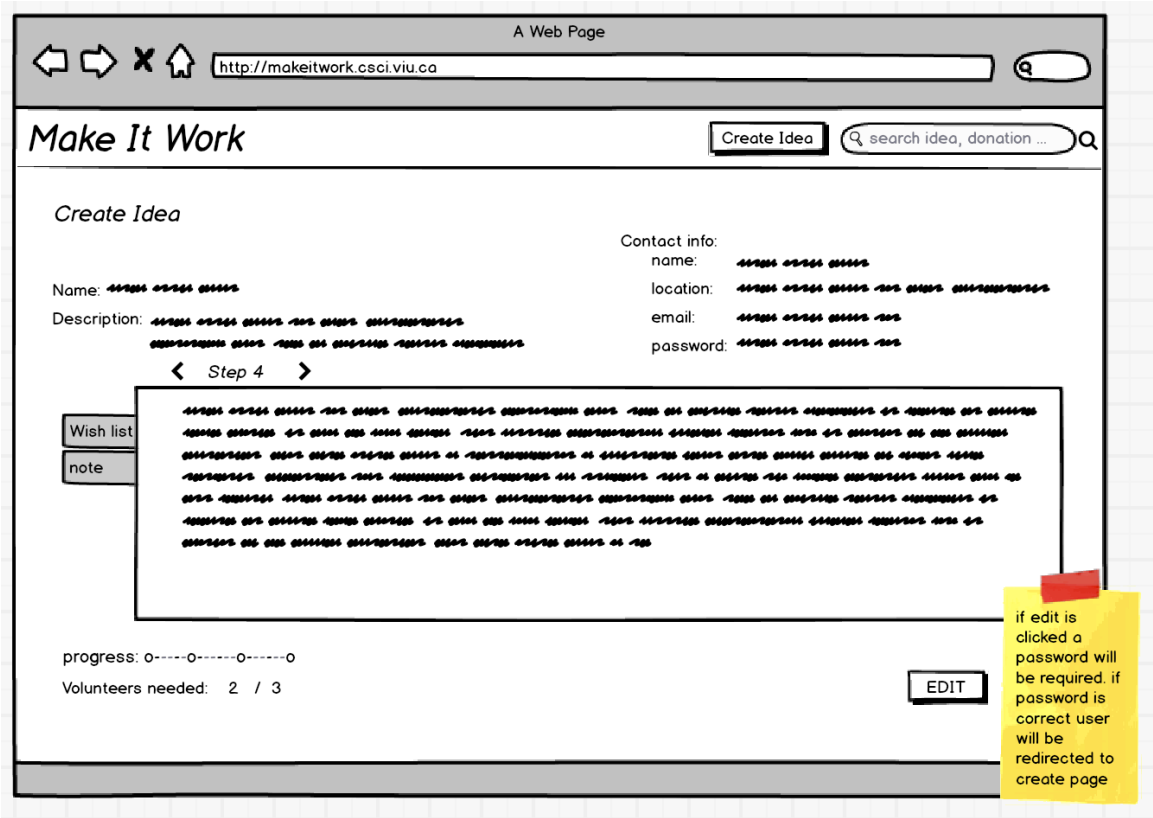
- List of all projects/ideas
- Button for creating idea
- Search bar to search for specific ideas



View an idea:

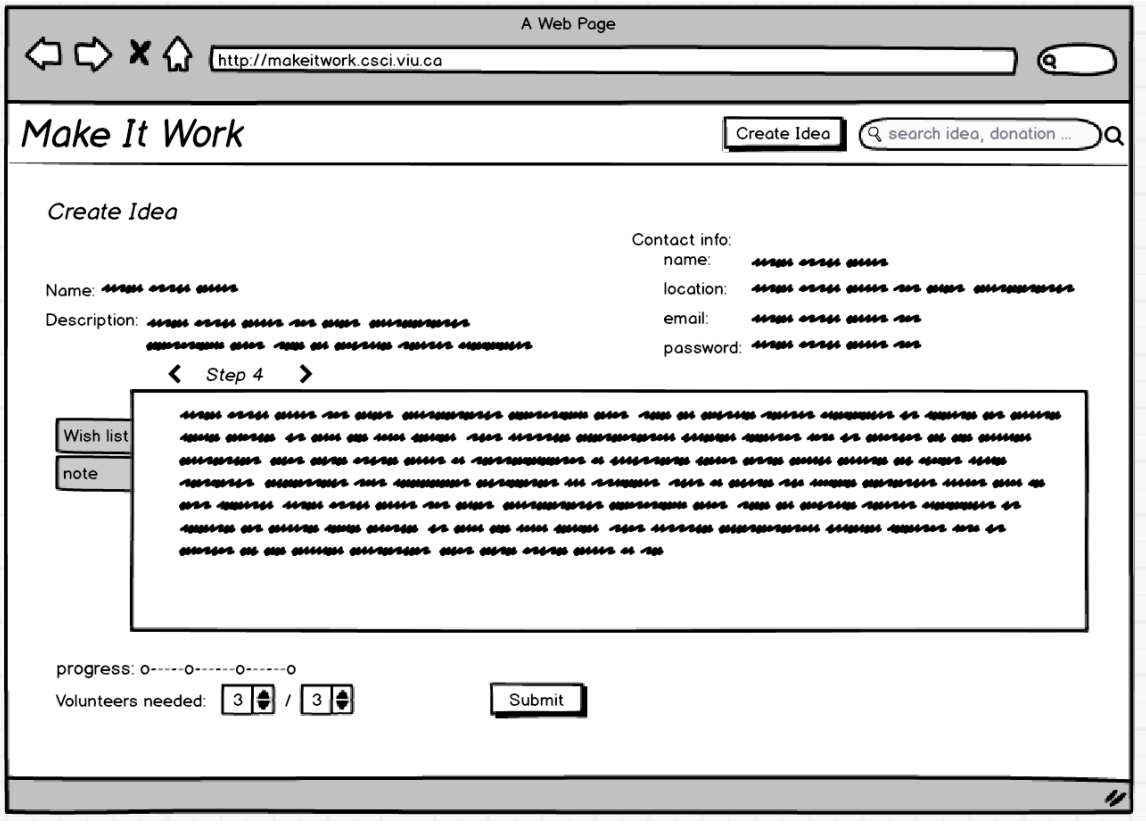
- Title
- Contact info
    - Name
    - Location
    - Email

- Idea info
    - Body
    - Current state
    - Next state
    - Overview of steps
    - Wish list: needed skill/resources
    - Notes
    - Edit (pop up with password verification)



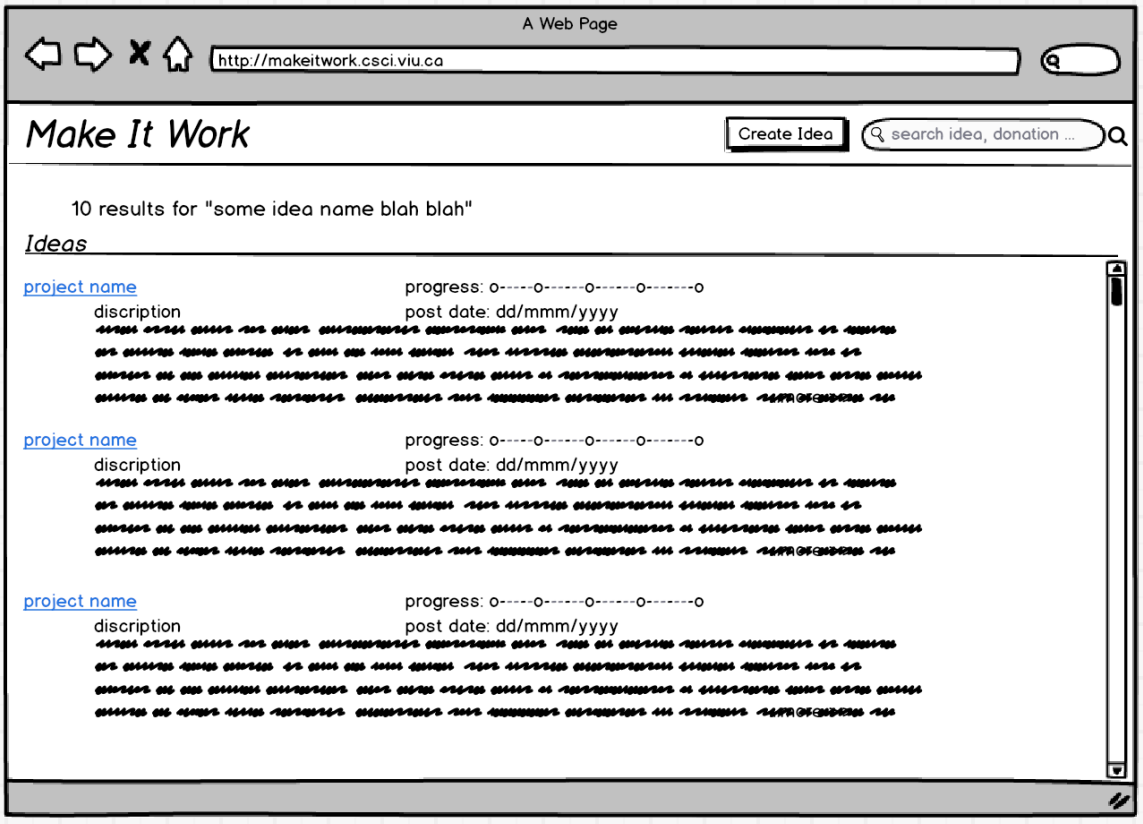
Create/Edit idea:

- Title
- Contact info
  - Name
  - Location
  - Email
  - Password
- Idea info
  - Body
  - Current state
  - Next state
  - Overview of steps
  - Wish list: needed skill/resources
  - Notes
- Submit button
- Remove button



Search page:

- To be decided on later.
    - The search page will only be implemented if time permits. The search bar will either be removed or kept for show until the search page is decided upon.



Interface Requirements:

- The team we will follow the following interface requirements when designing and implementing the interface.

1. Main links always on top of the screen.
2. Provide appropriate feedback at all times.
3. Use calendar picking when choosing date/time.
4. Prevent information overload (use pages).
5. Consistent navigation and style between all pages
6. Design should be simple and clear.
7. Follow standard design and use familiar metaphors.
8. Design should be forgiving.

Functional requirements:

- Functional requirements are tasks our system must perform.

Primary requirements:

1. Create an idea.
2. View an idea.
3. Remove an idea.
4. Edit an idea.

Secondary requirement (if time permits):

5. Search for a specific idea from ideas list.

Non-functional requirements:

- Non-functional requirements are the requirements that our software must conform to like performance requirements, intended operating environment and any maintainability, portability, security, and legal requirements.

- The following are the non-functional requirements that found to be relevant to our product.
    1. The web interface should run well on popular browsers like chrome, firefox, and safari.
    2. Reliability: All pages should be error free and run on appropriate server.
    3. Security: idea edits and removals are password protected.
    4. Performance: Should not put undue strain upon end user.
    5. Proper documentation through out project for long-term maintenance.
    6. Legal and licensing issues (illegal posts/comments) should be dealt with.

Use Cases:

Use case	description
Create an Idea	Using the create idea option, enter appropriate information in the required fields, then submit idea.
Edit an idea	Choose idea, choose edit option, enter password, modify content, submit.
View an idea	Browse ideas, choose an idea, view idea.
Contact idea owner	Choose idea, find contact information, get contact information of owner.
Delete a idea	Choose idea, choose edit option, enter password, choose the remove option, confirm removal

Scenarios:

- Tom has an idea for a sandwich drive but needs support from the local community at his university. Tom goes to the "Make It Work!" site, chooses create idea then types "sandwich drive" in title, "need help making and distributing sandwiches" in description, "Need five people, 100 buns, and 10 jars of peanut butter" in wish-list. He then types his name, location, email in contact info. He sets the number of volunteers needed to 5. He then types a new password in password, then submits his idea.
- Hana likes to volunteer, so she goes to the "Make It Work!" site and sees Tom's idea at the top of the list of idea. She clicks on the idea to view it. She is interested and decides to contact tom, so she looks for contact info and gets Toms email to email him later from her phone.
- After Tom was contacted by Hana, Tom goes on the site, chooses his idea, then clicks on edit, then enters password, then changes adds one to the volunteers out of five that he needs. He then submits his changes.
- After the sandwich drive Tom goes to the site, chooses his idea, clicks on remove, enters password, then clicks on confirm removal.

Description of feature set the team plans to implement in time for the final presentation April 10th:

- Create an idea: This feature should take the user to the create idea page and take in all information needed for the idea and contact info of the individual. Once all required info is done the user should be able to submit the idea. This feature is found at the top right hand corner of the site.
- Edit an idea: This feature gives the user, the flexibility to update information as the idea progresses, the feature is found on the view page, the user will be required to enter the password before they can make any changes and submitting them afterwards.
- View ideas: This feature allows users to view details for the ideas they are interested in. This feature is put in action when the user clicks on the idea from the list of ideas on the main page.
- Remove an idea: This feature gives the user, the flexibility to remove the idea once it has been completed or if the creator simply wants to remove it. This feature is found on the view page, the user will be required to enter the password before they are asked to confirm removal and have the idea removed for good.

Preliminary Acceptance Testing Plan

Outline of the planned approach to test the final product:

- General outline of the plan:
    - Two types of tests will be used. Functional testing done by team members and User Interface testing which will be performed by third party and team members.
    - Tests will be performed on all features by running through use cases, checking where problems or errors arise and gather data about them.

Preliminary timeline for testing, bug fixes and retesting in a table:

GanttChart

Make It Work!												05-02 06-02 07-02
ID	Task Description	Assign To	Nature	Start Date	Planned End Date	Actual End Date	% Complete	Work Days Planned	Work Days Elapsed	Work Days Remain	Work Days Overrun	
3.5	UI Prototype	Ben + Tony	Implementation	09-Mar-18	10-Mar-18			1	0	1	0	
3.6	UI Testing	Sami +Pete	Validation	11-Mar-18	12-Mar-18			1	0	1	0	
3.7	User Evaluation	Caleb+Tony	Validation	13-Mar-18	15-Mar-18			2	0	3	0	
3.8	Fix UI accordingly	Ben + Tony	Implementation	16-Mar-18	18-Mar-18			2	0	1	0	
4.3	Software Testing	Caleb+Tony	Validation	22-Mar-18	24-Mar-18			2	0	2	0	
4.4	Iterate over implementation and testing + update files6 until satisfactory	all mem	Validation	25-Mar-18	04-Apr-18			10	0	8	0	

    - Development and set up of test environment:
        - Functional testing will take place in the lab, while user interface testing place will vary depending on test subject.
    - The tests:
        - Tests will be conducted either individually by team members or with help of third party individuals. All features will be tested for functionality and design by going through the set of relevant use cases, noting all errors that arise and all design requirements that weren't met, and documenting the severity, cause, and possible solution for each.
    - Application of tests:
        - Tests will help us catch errors or bugs and improve final product.
    - Intended testing environment, tools, and processes
        - Functional tests will take place in lab or where ever a team member is capable of preforming them. Interface tests will take place on the system or platform the test subject prefers. For functional testing we will use debuggers and get other team members to review each other's work. Tools used for interface testing will be a stopwatch and notes (audio, written, or typed).

- Feature sets and requirements to be tested:
  - We will be testing all primary features and any secondary features that time permits to implement. Some secondary features might not be testable as they are just for show and not actually fully implemented. Will test all interface and non-functional requirements mentioned.
- Preliminary ideas of how to test those requirements
  - Group feedback sessions.
  - Interface evaluation.
  - Peer code review.
  - Usability heuristics.
  - Debugging.