Team Name:
Build it

Members:
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Description:

A user-friendly website where hobbyists, contractors, and everyday homeowners can go to plan a shed project. The website will give you access to design the structure from scratch. Several pre-designed options will be laid out to choose from i.e. a hierarchy of options to select from as you go through each of the options available. There will be a system computing the costs of the materials used in the project. A forum section will be included where the homeowner can do the project themselves and seek advice from experienced builders.

If the user chooses not to build the project themselves they can upload their design on the website and have contractors bid on the project. This gives the consumer multiple options to select a contractor that best fits their budget, quality of work, and timeline. At the end of the project the user will rate the contractor on the work they've done. The user and the contractor will both have profiles on the site to have access to the forums and bidding page.

Vision Statement:
Help amateurs learn about and create their dream home improvements.

Risks:

1. Scope of the Project
   We want to incorporate a lot of interconnected features into this project that could prove to be a cumbersome and overwhelming.
2. Lack of Experience
   Our team has only one person pursuing a computer science degree. Our team's technical skills may be lacking. This means that we may not be capable of implementing vital features to the project.
3. Trouble communicating and/or meeting
   We're all busy. Certain weeks, other classes will take priority. One or more members may be unable to meet a deadline or not know the true progress of the project.

Risk Mitigation Plan:

1. To tackle the scope problem we will begin with creating the fundamental components of the project and add features if time allows. Using the AGILE development method, it will be simple to add user stories as the project progresses. We will also keep a strict approval process on new features in order to keep us from pursuing unreasonable projects.

2. In order to mitigate our team's lack of knowledge, we will assign specific people to specific tasks. These people will then do the research required to accomplish tasks. This will prevent time being wasted with multiple people researching the same tasks. We will implement this within our team meetings.
3. In order to overcome our communication issue, we can do most of our meetings through skype if need be. We will keep track of a backlog and notes of each meeting, indicating what our goals are for what needs to be done before the next meeting/ to meet the next milestone.

Version Control:

GitHub

To help avoid communication issues and mixing up work we will avoid assigning people the same job (so that two team members are not working on the same section of code at the same time), require approval from all members before merging to master branch.

Development Method:

AGILE

Starting small is a key component of our risk mitigation plan. Continued iteration of short development cycles fits well with the agile design methodology. Regular meetings and communication will ensure that the separate teams function together and provide visibility of progress across the project team as a whole.

Collaboration Tool:

GroupMe and Google Docs

We chose these two collaboration tools because they are both something everyone in the group was already familiar with. They are easy to use and have all the functionality we need.

Proposed Architecture:

This application will be a web application. The front end will use HTML and CSS for styling. The backend will have a SQL database. We will use Node.js to connect the front end and back end. This architecture will allow data to be passed between the user and backend easily.