- **App Idea**
  - Premortem: A 5 step process, done before a project starts, used by a group to determine reasons a project could fail and come up with possible solutions to prevent those failures.
  - This will be a web app that will be used in conjunction with a facilitator to bring a group through the "premortem" process. Users will be able to join a group and provide answers to timed questions, and will be able to review the results of the premortem at the end.
- **Users**
  - Users can be anyone working collaboratively that wants to do a premortem to help plan their project.
  - This will be broken down to two groups: one facilitator leading the meeting, and any number of others that will give the facilitator the information for the premortem.
  - Anyone should be able to use the app, and the user should need little/no experience with technology.
- **Major Workflows**
  - Users load the webpage (in any order). They have several options available: create new premortem, join existing premortem.
  - One user (the facilitator) clicks on "create new premortem". This takes them to a page where they can create the name of the room and obtain a room code to share with other users. They can then wait and see what users that have joined the room, and can press a button to begin the premortem process with the users that have joined.
  - Other users can click "join existing premortem", where they will be prompted to enter a code. A proper code will redirect them to the appropriate room, where they will wait for the facilitator to start the premortem process.
  - Once the facilitator begins the process, a prompt detailing the first step of the premortem process will be displayed to all users (end of project...what went wrong?). Once users have decided amongst themselves that they are ready, the facilitator can click "begin". This starts a 2:00 timer (that all users can see) where all users (including the facilitator) can begin entering information.

- ○ Once the timer is up, they will be brought to another page to review what everyone has entered. Users can submit their top answers as they see fit. Only the user that created the answer can see it until they submit it, in which case everyone will be able to see their answer. The facilitator can also mark an answer indicating how many users had a similar answer. Once done, the facilitator can move the process to the next step.
  - ○ This process repeats until all steps are completed and the premortem is done. At the end, all users can download a PDF copy of the results of the premortem. Once all users have left, the room is deleted.
- **Views** –
  - ○ Welcome page
  - ○ Launch page
    - ■ Where facilitator can create the rooms
  - ○ Team roles page
  - ○ User entries page
    - ■ Where users can enter in information about how to solve the problem
  - ○ Solutions/Export page
    - ■ The facilitator exports the page of solutions to the PDF.
- **Data**
  - ○ Form PDF
    - ■ Name of project
      - ● String
    - ■ Reasons of failure list
      - ● Array of strings
    - ■ Solutions for failures list
      - ● Array of strings mapped to corresponding reason
    - ■ Names of people on team
      - ● Array of strings
  - ○ Username for "logging in"
    - ■ String
  - ○ Maintain a Timer

- - - Integer
  - ○ Room Name
    - ■ String
  - ○ Room Number (four digit, alphanumeric)
    - ■ Character array
  - ○ Socket Information (private)
    - ■ Web socket key
    - ■ Host URL
    - ■ Message for sending reasons and solutions
    - ■ Chat message for messages between users (stretch goal)
  - ○ Text fields for submitting reasons and solutions
    - ■ String
- **Anticipated Challenges** – Now that you have a clearer vision of the app you identify challenges. These challenges include both usability and implementation challenges. Usability challenges are generally related to errors that users may make.
  - ○ Some of the usability challenges include making sure it's easy to submit answers, making sure the prompts and how to respond to them are easily understood, and making sure it's easy and intuitive to create a "room". If these are implemented poorly, users could find it difficult and unintuitive to understand and go through the process.
    - ■ It should be easy enough where anyone, including the facilitator, to create a room and run the premortem
  - ○ There were several implementation challenges we will have to deal with:
    - ■ Dynamically generating page
    - ■ Creating fields that turn into the users answers
    - ■ Seeing "your" answers vs. the "posted" answers
    - ■ Allowing users to organize their answers
    - ■ Creating a "room" that multiple people can join
    - ■ Using websockets