**Team 6 – Members**

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**First Idea: Remote Monitoring System for Annealing Ovens**

1. The motivation (why it is a cool idea, why it is needed, who would use it, what makes it unique, etc.)
   1. Orchid International is a company that produces metal fabrications for multiple industries. Currently they must have employees watch oven temperatures 24/7/365. These employees do nothing but stare at oven temperatures all shift long, and their labor could be used elsewhere for productivity within the company. The program we create would monitor the oven temperature, and if it gets out of range, would send an alert to a team member who can then check on and fix the temperature issue.
   2. We’re up for the challenge of receiving inputs from a customer versus just creating an app we think is cool or useful. It gives us an opportunity to take information from a “customer” and build something for what they need.
   3. Our software would eliminate the need for such a boring job, improve the efficiency of the worker’s time, and provide these employees the much-added benefit of not being in rotation for nights, weekends, and holidays.
2. The high-level functionality (what specific functions will it do, 4-5 functions)
   1. Monitor temperatures of annealing ovens
   2. Send out notification to prioritized staff to alert them if any oven goes out of temperature range
   3. Allow managers to respond to the alert – this response would notify the team that someone has received the alert and is heading to fix the problem
   4. Create an LCD display that shows temperatures at each monitoring point
   5. Graph temperatures and provide feedback for temperature range, average, and oven efficiency
3. The platform and user interface for the project (desktop? web-based? mobile? GUI? text-based? etc.)
   1. Mobile
      1. App to receive alerts
      2. Potentially setting up a live video feed of the LCD screen
   2. Web
      1. Web can also receive alerts
      2. Potentially setting up a live video feed of the LCD screen
      3. Store data on company network
4. Logistics
   1. We will be utilizing
      1. Microsoft Teams
      2. GitHub
      3. Discord

**Second Idea: Web App and Dedicated Site that facilitates homes for low income families PREFERRED PROJECT**

1. **The Motivation:**
   1. Around 30% of American families are low income.
   2. Wisconsin’s low-income housing programs rely on outdated systems to facilitate qualifications and availability.
   3. By creating a dedicated web app that pre-qualifies households per each counties requirement, our software could connect families that need housing with low cost opportunities in Wisconsin.
   4. A partnership between our site and low-income housing around Wisconsin would be mutually beneficial to give secure housing to families that need it in our communities.
   5. Allows business to continue to operate during COVID, and provide housing due to minimizing contact.
2. **Functionality:**
   1. Website that is welcoming and informative about low income housing.
   2. Web App that requires inputs from user.
      1. Number of Household Members
      2. Gross Annual income
      3. Desired County(ies)
   3. Backend that Scrapes Wisconsin’s Low-Income Housing Requirements and inputs the correct amount into a database (the housing program updates this yearly in May).
   4. Web App compares user input to database, and returns what counties they qualify for, and in what Program.
   5. Partnership with Low Income housing programs to relay contact information between the User and the Program to facilitate a finalized product and/or lead.
   6. OPTIONAL: Application questionnaire text boxes, that outputs into PDF application that is then emailed to the Program.
3. **The Platform:**
   1. Mobile
      1. App for ease of access.
      2. Potentially maintenance request
      3. Rent payment portal (through third party)
   2. Web
      1. Website that hosts the project
      2. Store data on backend database
4. **Logistics:**
   1. Software
      1. Microsoft Teams/Discord
      2. GitHub