

PROJECT NAME:

SprintAR

TEAM WUBBALUBBADUBDUB MEMBERS:

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DESCRIPTION OF YOUR DESIGN:

Multi-faceted Mobile AR Virtual Whiteboard Platform on iOS

GOALS TO TACKLE:

- **Coronavirus**
  - The Manufacturing Index "February reading (35.7) is at an all-time low, eclipsing even decline during the Great Recession," Venkatu showed in his presentation. "In the first quarter, China's gross domestic product growth is expected to fall substantially, and may decline. The decline for the full-year growth is expected to be between 0.5 to 1.0 p.p."
  - https://www.sent-trib.com/news/coronavirus-hitting-economy/article_56da9106-6072-11ea-a6b6-ef95d216571d.html
- **Emerging Technology**
  - IoT
    - A recent report by the International Data Corporation forecasts a compound annual growth rate of 13.6 percent from 2017 to 2022 for worldwide spending on IoT, rising to nearly $1.2 trillion in 2022.
    - https://simpleprogrammer.com/emerging-technologies-iot/
    - Gartner, Inc. forecasts that the enterprise and automotive Internet of Things (IoT) market* will grow to 5.8 billion endpoints in 2020, a 21% increase from 2019. By the end of 2019, 4.8 billion endpoints are expected to be in use, up 21.5% from 2018. Utilities will be the highest user of IoT endpoints, totaling 1.17 billion endpoints in 2019, and increasing 17% in 2020 to reach 1.37 billion endpoints.
    - https://www.gartner.com/en/newsroom/press-releases/2019-08-29-gartner-says-5-8-billion-enterprise-and-automotive-io
- **Human Resources Movement**
  - Agile Scrum || Design Thinking
    - Scrum is being widely used: "nearly half the respondents report that Scrum is being used "50% or more of the time in their organizations," and 29% of respondents report that is used "much more frequently than that."

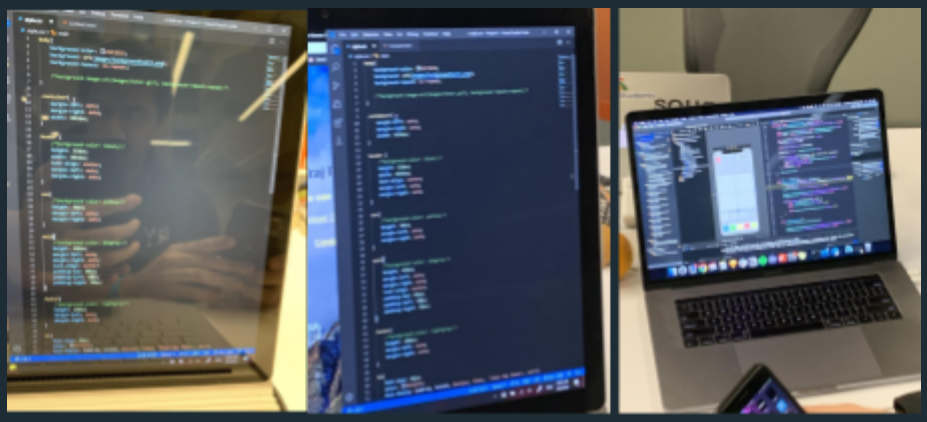
        - https://www.forbes.com/sites/stevedenning/2015/07/23/the-worlds-most-popular-innovation-engine/#58b6843d7c76
        - [Design Thinking is a] new approach is in large part a response to the increasing complexity of modern technology and modern business... Sometimes software is at the center of a product and needs to be integrated with hardware (itself a complex task) and made intuitive and simple from the user's point of view (another difficult challenge)... [Design Thinking] is the best tool we have for creating those kinds of interactions and developing a responsive, flexible organizational culture.
        - https://hbr.org/2015/09/design-thinking-comes-of-age

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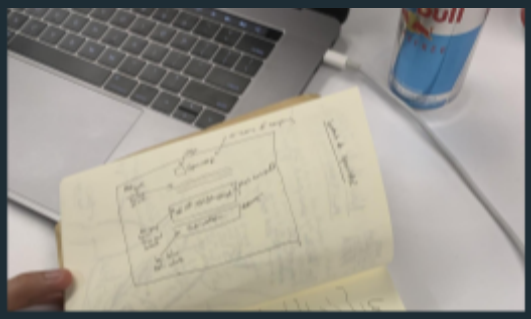
APPROACH

- ADDRESSING THE TRENDS OF CORONAVIRUS, EMERGING TECHNOLOGY, AND THE HUMAN RESOURCE MOVEMENT
- Brainstorming
    - Rapid Prototyping
        - Web App
        - Real-time
            - Real-time insight into errors helps companies react quickly to mitigate the effects of an operational problem. This can save the operation from falling behind or failing completely or it can save your customers from having to stop using your products. New strategies of your competition are noticed immediately
                - https://www.google.com/search?q=benifits+of+Real-time&oq=benifits+of+Real-time&aqs=chrome..69i57.3387j0j4&sourceid=chrome&ie=UTF-8
        - Ability to draw
            - [Through drawing] cognitive processes increase. Cognition means acquiring knowledge and understanding through thought, experience, and the senses. Drawing means they are constantly thinking or feeling something, so what they choose to draw, the patterns they use, and the story they try to portray helps them build in their knowledge and visual skills.
                - https://www.mathgenie.com/blog/why-drawing-is-important-for-children
        - ~~Clipboard~~
        - ~~Voiceflow~~
            - ~~Interactive "Tutorial"~~
            - ~~Voice command~~
- Design a prototype of our vision of the app using figma
- Develop a demo of the AR
- Create a landing page for our product

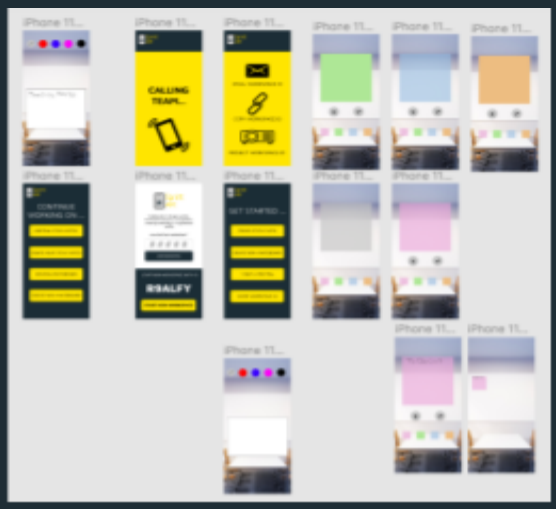
- https://www.figma.com/file/pyWmDP1XsmW9PHuIwlo9NA/Sprint-AR?node-id=0%3A1



Web Application Development



Initial Web Application Idea



Figma Prototype of the Application

APPLICATION

- Workplace
  - Facilitate project management methodologies
    - Scrum & Agile
      - Maximise the number of ideas you can conceptualize during sprints
    - Design Thinking
      - Easier to brainstorm
      - Platform to create roadmaps

            - Emphasis on collaboration
        - Human Centered
            - Prioritize the user experience
            - Individuals and interactions
            - Collaboration
            - Responding to change
    - Employee Engagement
        - Interactive
        - Forces movement
        - Difficulty retaining information and interest if the meeting/presentation is not interactive
- Education
    - “Method of loci”
        - Memory Palace
        - Force associations with a term with a certain direction (e.g. up, down, ect.)

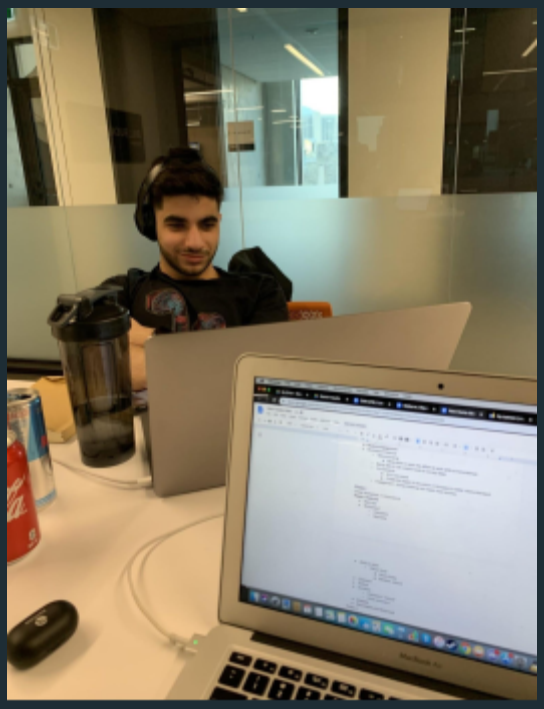
REFLECTIONS

- Learnings
    - First Web App: Reddit Client
        - Core Components of a website
            - HTML
            - CSS
            - Java Script
        - If you don’t know how to do it, google it
    - Google API
        - Integrating code with google cloud
    - Learning with Confidence
        - Rapid prototyping
    - Got the opportunity to learn more about each other and teamwork!
- Troubles
    - New Experience, on the most part we were very inexperienced
    - Financial Limitation we were unable to implement the cloud platform
    - Problems with tracking vertical planes, camera did not have depth perception
    - Scalability
        - Add call features VoIP
        - Same people can contribute to storyboard
        - Export to website.

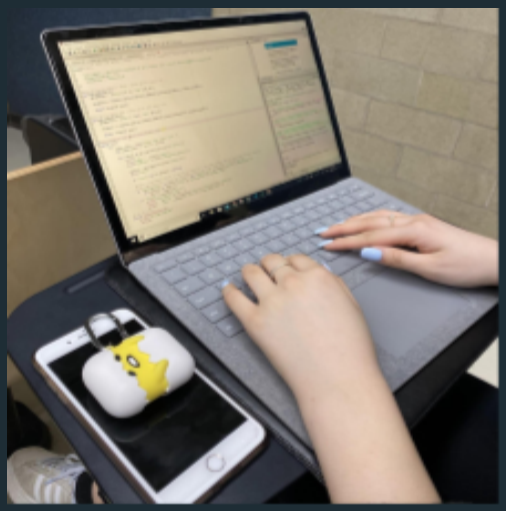
GALLERY



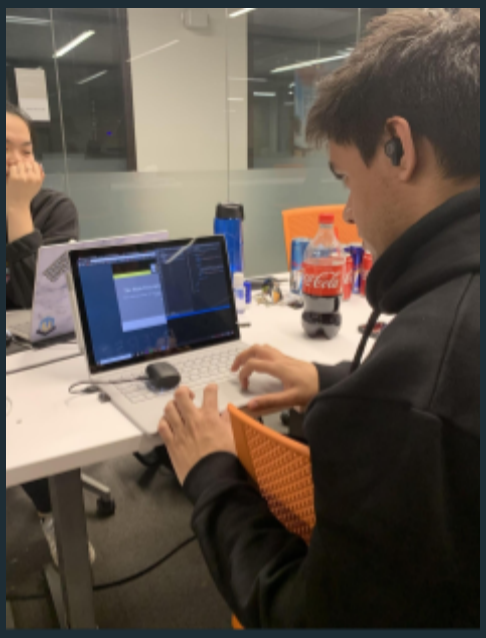
Daniel engaged in the Rapid Prototype Workshop



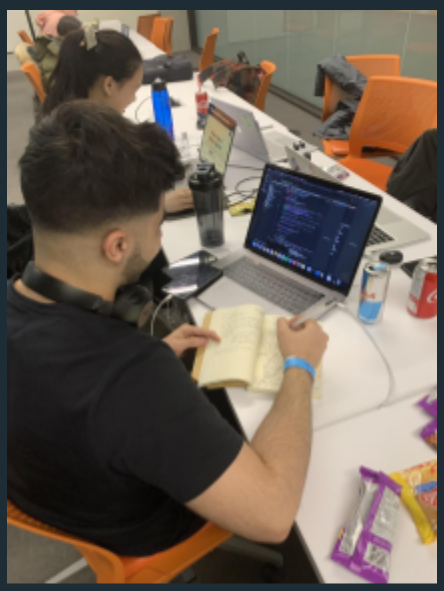
Mohammed having fun developing AR



Rene interactively learning about API's in the API-GCP Workshop



Vraj learning how to develop a web application



Rene and Mohammed hard at work



Vraj and Rene collaborating on the Web Application



Testing our Demo of the Sprint AR App



Recording a video for the Sprint AR App Demo

WORK DOCUMENTS:

https://docs.google.com/document/d/1YR2KGB9RBHEx8dV5g7LVWPlOjlMQTHKdI3wjHaNrpsI/edit?usp=sharing

https://docs.google.com/document/d/1CcAZ9fw46eYj73n8JPuaA6LXY7Q64hL0oYKHc6b9NVw/edit?usp=sharing

https://www.figma.com/file/pyWmDP1XsmW9PHuIwlo9NA/Sprint-AR?node-id=0%3A1

https://docs.google.com/presentation/d/12IOo6b1QlHolOaYuS8y2L4bca_VwG5fKp8SZTdZyV6I/edit?usp=sharing