Parent Health Literacy Design Review

Team HealthLit

Our Team

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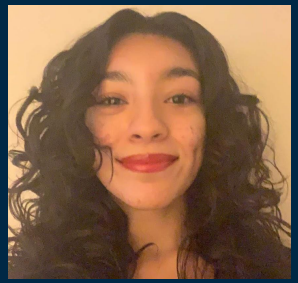
Team Lead
Client Relations
Developer



Leslie Gurrola
Architect
Developer

Ahmir Hughes
Recorder
Developer

Brendan Tjeerdsma
Release Manager
Developer

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CS Faculty Mentor

Our Client

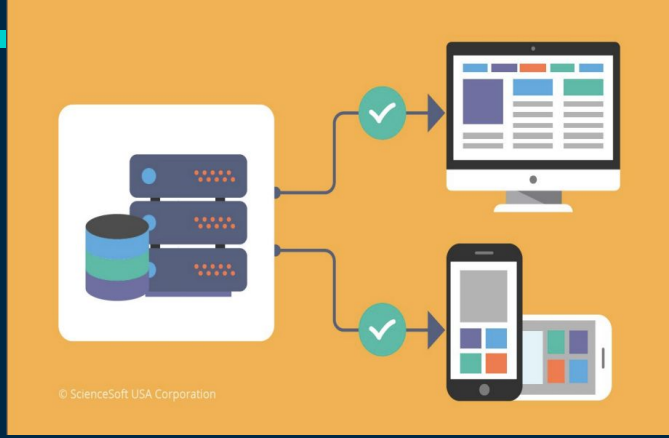
- Studies child and maternal health
- Focuses on behaviors related to child health
- Wants to improve life for families in rural and indigenous communities

Dr. Olivia Lindly – *Dept. of Health Sciences*

The Problem

- Issue with younger parents having weak health literacy taking care of their children
- Current methods to solve this need improvement
- Problems in the quality and dissemination of information related to health literacy and child health practices.
- Doctors will often give parents information in the form of pamphlets
- This form of information transmission often comes with problems such as
    - Parents reading over the information and then quickly forgetting it
    - Parents discarding the information
    - This information may not be widely available, especially in indigenous or rural communities
    - This information can be technical and hard to understand for parents with a lower level of health literacy.

Solution



- Our app will help by utilizing interactive modules
- It will solve the previously mentioned problems by
  - Increasing engagement with the material
  - Storing the information in an easily accessible place
  - Making the information easily accessible
  - Making the information easy to understand
- Our goal: increase the health literacy of parents through engagement

Tech Integration of Proposed Solution

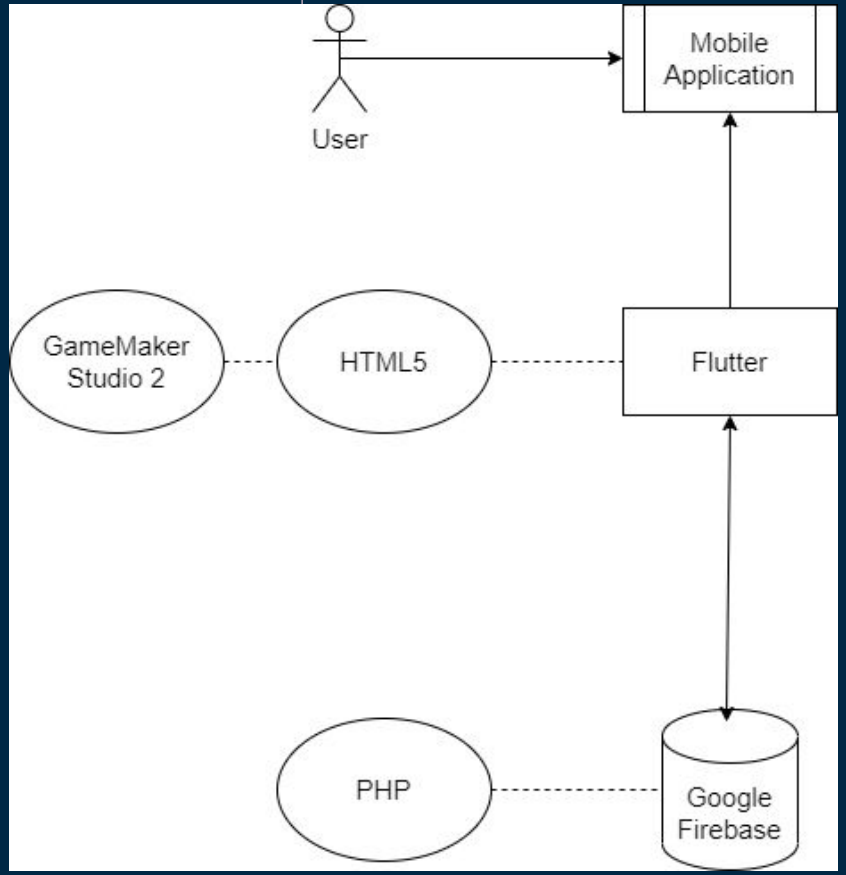


Figure 1: Visual representation of Technical Implementation

High-Level Requirements

- Modules
  - Implementation for beginning phases
- Gamification
  - Educational and Interactive
  - Pass or Fail
- Data Management
  - Test Assessments
    - Newest Vital Sign (NVS)
    - Brief Health Literacy Screen (BHLS)
    - Health Literacy Skills Instrument Short Form (HLSI)
- User
  - Ease of Use
    - Target Audience
    - No training required

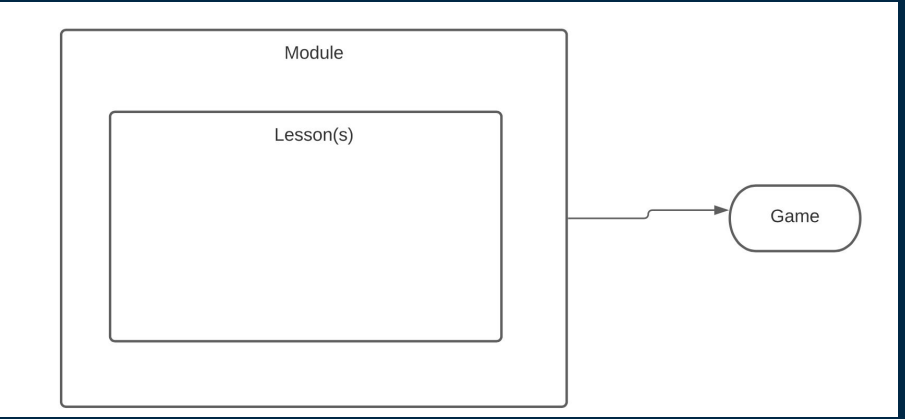


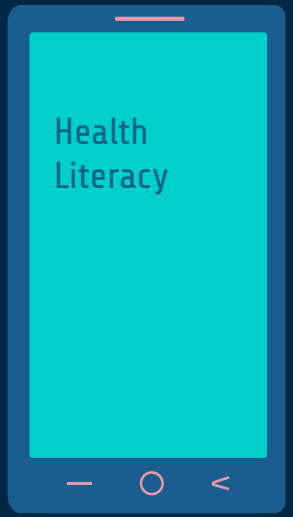
Figure 2: Visual representation of Module hierarchy

Non-functional and Environmental Requirements

- Usability and Interface Design
  - Testing for modules and games
    - Example -> Users have a completion rate of 80% for modules and pass game within first 3 tries
- Game Response
  - Test how long it takes for users to complete game
  - Test how many attempts the users take to complete the game
- Operating systems
  - Apple's IOS
  - Android

Ideal Application Flow for Users

- User open application
- Users set up personal account inputs their and their children's age, name, and gender.
- User then takes one of the three assessment tests.
- User then goes into their prefer module.
- Once module is completed then they play module game.



Potential Risks

- Medical Misinformation
- Database Security
- HIPAA Regulations

Health Literacy Application Schedule

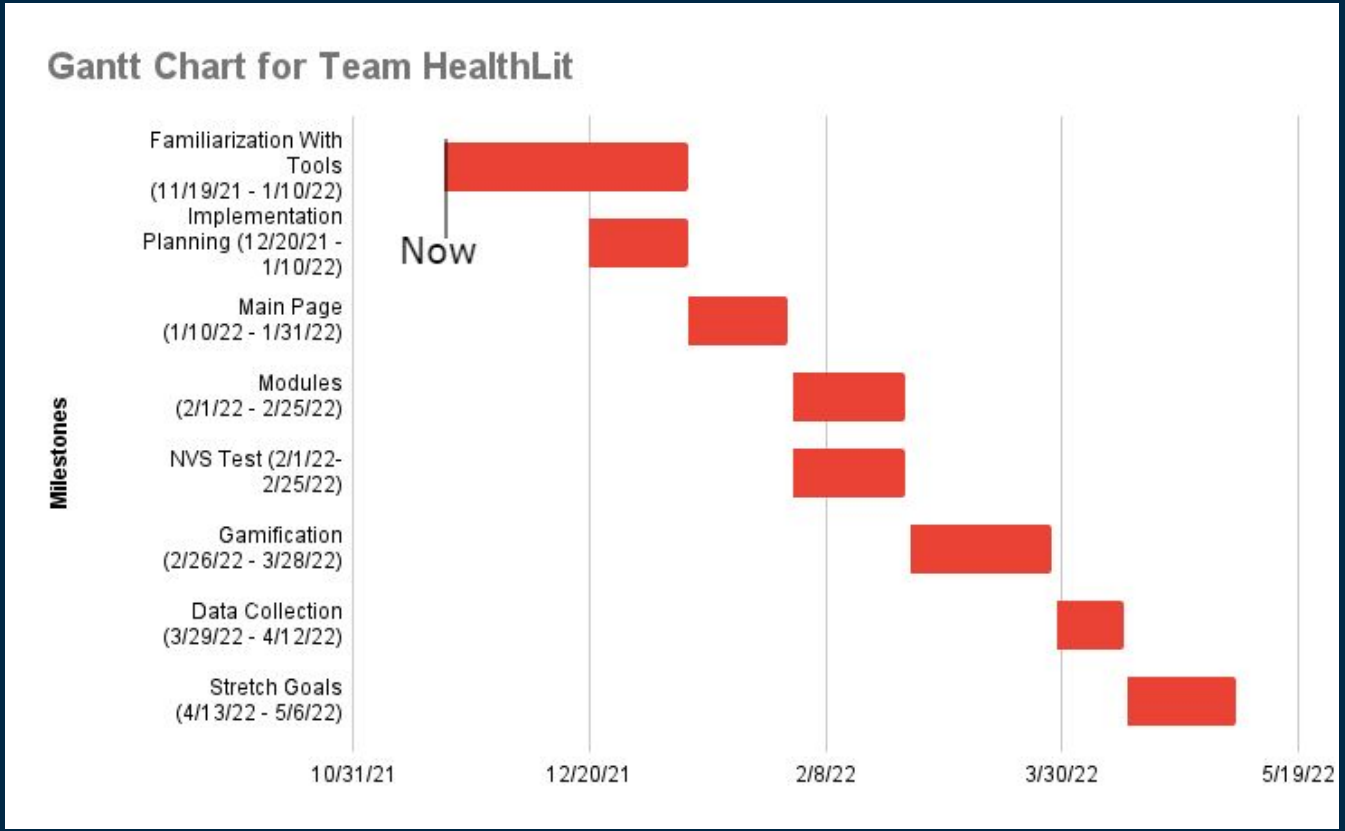


Figure 3: Gantt Chart for the Project Plan

To Conclude

- Looking to increase health literacy of parents
- Will do this through a mobile app that will
  - Increase engagement
  - Increase information retention
  - Provide accurate information
- This will require implementation of
  - Modules
  - Gamification techniques
  - Proper data management
  - User facilities

- We have a number of non functional requirements such as
  - Standards for usability and interface design
  - Standards for game response time
  - OS compatibility
- There's also a number of potential risks such as
  - Medical misinformation
  - Database security
  - HIPAA regulations

Do you have any questions?

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THANKS