**Software Implementation and Testing Document**

**For**

**Group 21**

Version 1.0

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# Programming Languages (5 points)

NextJS - we chose this framework because it is easier to build quickly using it, and something that can be customized to make our application faster

React - we chose React because of how popular it is and previous experience with it.

TypeScript - We went with TypeScript over plain JavaScript for type safety and a more clean scalable codebase.

HTML + CSS - these are foundational and had to be used, classics.

Coming soon: we will likely use Java, TypeScript, or Python and a language respective framework for backend logic.

# Platforms, APIs, Databases, and other technologies used (5 points)

Currently we are using NextJS as the framework/platform for the front-end. We will start requiring more dependencies in increment 2.

# Execution-based Functional Testing (10 points)

We do not have any functional based unit tests or similar technologies set up yet. But we plan to add this in future increments. Our product does not currently justify it.

# Execution-based Non-Functional Testing (10 points)

We performed an extensive non-functional testing together by just making sure our UI layout was intuitive and accessible for all users. It was more so a collective and thorough review rather than anything concrete or based off a rubric.

# Non-Execution-based Testing (10 points)

We made sure all of our code was syntactically correct and easy to understand/read. We pair programmed in person which really helped this process too.