FTA Notepad v2

A proposal for a modern, open source, and user-friendly web app for FIRST Robotics FTAs

# Introduction

This project proposes a new FTA Notepad, a web app for technical support and monitoring at FRC events. The current FTA Notepad is a mobile app that is outdated and hard to update. The new FTA Notepad will be a modern, open source, and user-friendly web app that can be accessed from any device with a browser and an internet connection.

# Vision

This project's vision is to develop a new FTA Notepad, a web-based application accessible from any device with a browser and an internet connection. This includes FTA phones, tablets, as well as the FTA toughbook or other laptops that FTA chooses to put on the scoring table. The new FTA Notepad will have the following features and benefits:

* It will be written in a modern and popular web development framework that is easy to maintain and update.
* It will be open source and hosted on a public repository that allows FTAs and other developers to contribute and improve the code.
* It will allow FTAs to record and track notes on individual teams, matches, and the entire event with ease and efficiency.
* It will have a clean and modern user interface that is intuitive and user-friendly.
* It will support data sharing among FTAs at an event and simplify post-event report generation for HQ.
* It will have documentation and a user manual that explains the features and functions of the app.

The new FTA Notepad will enhance the productivity and satisfaction of the FTAs and the quality and safety of the events. It will also foster a community of FTAs and developers who can collaborate and innovate on the app.

## Timeline

We aim to complete the development of the new FTA Notepad by January 2025, but ideally, we want to have it ready for testing during the offseason events in 2024. To achieve this goal, we have divided the project into four phases:

1. Phase 0: Recruit developers from the FTA community and set up the repository and technology choices. This phase should be done by the end of June 2024.
2. Phase 1: Replicate the existing features of the old app, such as taking and exporting notes, tracking the current match, and displaying information from the field monitor. This phase should be done by September 2024.
3. Phase 2: Integrate with the HQ system to enable automatic report generation and field inventory management – ideally, we should be able to record things to be sent to the next event, consumables usage, and other things during the event and have HQ be automatically able to get this info, rather than needing an explicit post-event step in Slack. This phase should be done by November 2024.
4. Phase 3: Add new features and enhancements, such as showing more data from the field, providing analysis and recommendations, and allowing collaboration with CSAs. This phase should be done by January 2025.

We will use an agile methodology to develop the app, with regular sprints, reviews, and feedback sessions. We will also solicit input and suggestions from the FTA community and HQ throughout the process.