**Youth Red Cross Mobile Application**

**Velammal Engineering College**

**Introduction**

The Youth Red Cross (YRC) mobile application is a centralized platform designed to streamline administrative activities. The initial phase focuses on automating essential tasks such as attendance management, OD (On Duty) generation, letterhead generation, Google Drive integration, and core members management.

**Tech Stack**

* **Backend:** Python (Flask) with REST API, MongoDB, deployed as a microservice (AWS or other)
* **Frontend:** Flutter (Mobile Application)

**Features (Phase 1)**

1. **Attendance Management** – Track and manage event attendance digitally.
2. **OD Generation** – Automate the generation of On Duty (OD) letters for students.
3. **Letterhead Generation** – Generate official letterheads for YRC communications.
4. **Google Drive Integration** – Centralized storage for YRC event documents.
5. **Core Members Management** – Manage the list of core YRC members efficiently.

**Team Members**

**Team Lead**

* Siddharth Magesh

**Backend Team**

* Tarakeshwaran
* Vishvaa K (II CSE B)
* Sujhan S (II CSE B)
* Kaviyalakshmi R (CSE-D, 1st Year)

**Frontend Team**

* Andalpriyadharshini
* Dakshan
* Karthikeyan K (ECE A, 1st Year)
* Agaran (AI&DS, 1st Year)
* Divyasree S (III CSE A)
* Shamini P (I CSE C)
* Harshit JK (I CSE CS)
* S. Rubin Kanna (AI&DS, 1st Year)

**Deployment Strategy**

* The backend will be implemented as a REST API using Flask and MongoDB.
* It will be deployed as a microservice on AWS or an alternative cloud provider.
* The mobile application will be developed using Flutter for cross-platform compatibility.