Project Calendar

Modules

* Communications Module
  * V2X Communications
  * Wifi / LTE Communications
* Web App Module
  * Frontend
  * Backend

Task List

◈ Communications Module (Tomás & André)

    ◈ Hardware Selection (Tomás & André): Choose viable hardware according to the requirements engineering previously done.

    ◈ Investigate Communication Protocol (Tomás & André): Learn how the communication works and send an 'Hello World' packet.

    ◈ Investigate and Craft Emergency Packet (Tomás & André): Craft and send a custom made emergency packet.

    ◈ Choose gateway car & establish communication between them (Tomás & André): After the emergency packet is broadcasted, choose a gateway car and establish a data stream.

    ◈ Send information (Tomás & André): Get accident information from vehicles to the gateway car then to the roadside unit, finally offload the data to the web app to be processed.

    ◈ Extra:

        ◈ Livestream (Tomás & André): If possible, livestream the aftermath to the web app in collaboration with nearby cars

Task List

- ◇ Web App Module (Daniela & Filipe & Gustavo & Ricardo)

  - ◇ Framework Investigation (All): Investigate and select a framework according to the requirements engineering previously done.

  - ◇ UI Design (Ricardo, Daniela): Design and implement UI functionalities.

  - ◇ Database (Ricardo): Design and implement a database on the chosen framework.

  - ◇ Data Processing (Filipe, Daniela, Gustavo): Process all the data received from the roadside unit.

  - ◇ Extra:

    - ◇ Processing Livestream (Filipe, Gustavo): In case of implementation, process the livestream.

Project Schedule

◈ Gantt Diagram of the project

Milestones

- M1:
  - Be able to explain the project
  - Present the project calendar
  - Present a draft of the systems' architecture
- M2:
  - Have a fully validated architecture
  - Have a basic version of the web app and communication system

Milestones

- M3:
  - Be able to communicate using V2X and Wifi
  - Be able to send and show some information in the web app
  - Define MVP
- M4:
  - Full communication between cars and roadside unit
  - See all the mandatory information in the web app

Deliverables

- M1:
  - Website ProjectARC
  - Project Schedule
  - Project Presentation
- M2:
  - Validated architecture
  - Documentation
- M3:
  - Web App prototype
  - Communications prototype
  - Documentation about both modules
- M4:
  - Fully functioning system