**Sensible promotional video:**

https://drive.google.com/file/d/1a7\_PtwtYCaiUoq1k1Z2ZQLxh76ljyN2Y/view?usp=sharing

**Project description:**

Gathering well-labelled data for machine learning projects can be very difficult and expensive. These days we all carry around a mobile phone which has sensors ranging from accelerometers to ambient light sensors. The goal of this project is to produce an app for Android and iOS which can harness these existing sensors for data collection. It will allow data to be labelled in real-time as well as allow selecting which sensors collect the data. The app is for educational purposes and will be very useful for machine learning students as they will not be restricted to using existing applications which tend to either not allow labelling or do not allow the selection of sensors.

The Sensible project differs from existing smartphone sensor apps in two keyways: Labelling data **during** collection, and deliberately seeking to offer maximum sensor coverage. Most apps that allow the user to record sensor data do not try to support the widest array of sensors available on the device, and they provide no way for the user to label the data during collection, if at all.

To ensure users do not worry about the privacy of their data being collected, all data will be stored locally, accessible only to the owner of the device unless they choose to share it via a third-party platform. The app will not transmit any collected data without the user's knowledge; as the project is open source, this fact will always remain verifiable. Local storage is very difficult to break into from outside applications and it would be very difficult for a potential attacker to be able to steal any user's personal information. Additionally, we classify most of the data collected using the app as non-sensitive, but for the sensors that do potentially record sensitive data, we will include a warning that this is the case.

**Team biography:**

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| **A person with a beard  Description automatically generated with medium confidence**  **Ryan Turner**  Team Leader, documentation, communication with shadow team | **Ian Oxborrow**  Frontend app development, screen designs, meeting minutes | **Maddy Carden**  Client liaison and documentation |
| **King Ho Cheung**  Frontend app development, presentation developer | **Chathura Galappaththi**  Backend app development, sensor research, model development | **Tristan Smith**  Backend app development, sensor research, model development |