

Lodipon

Team & task distribution

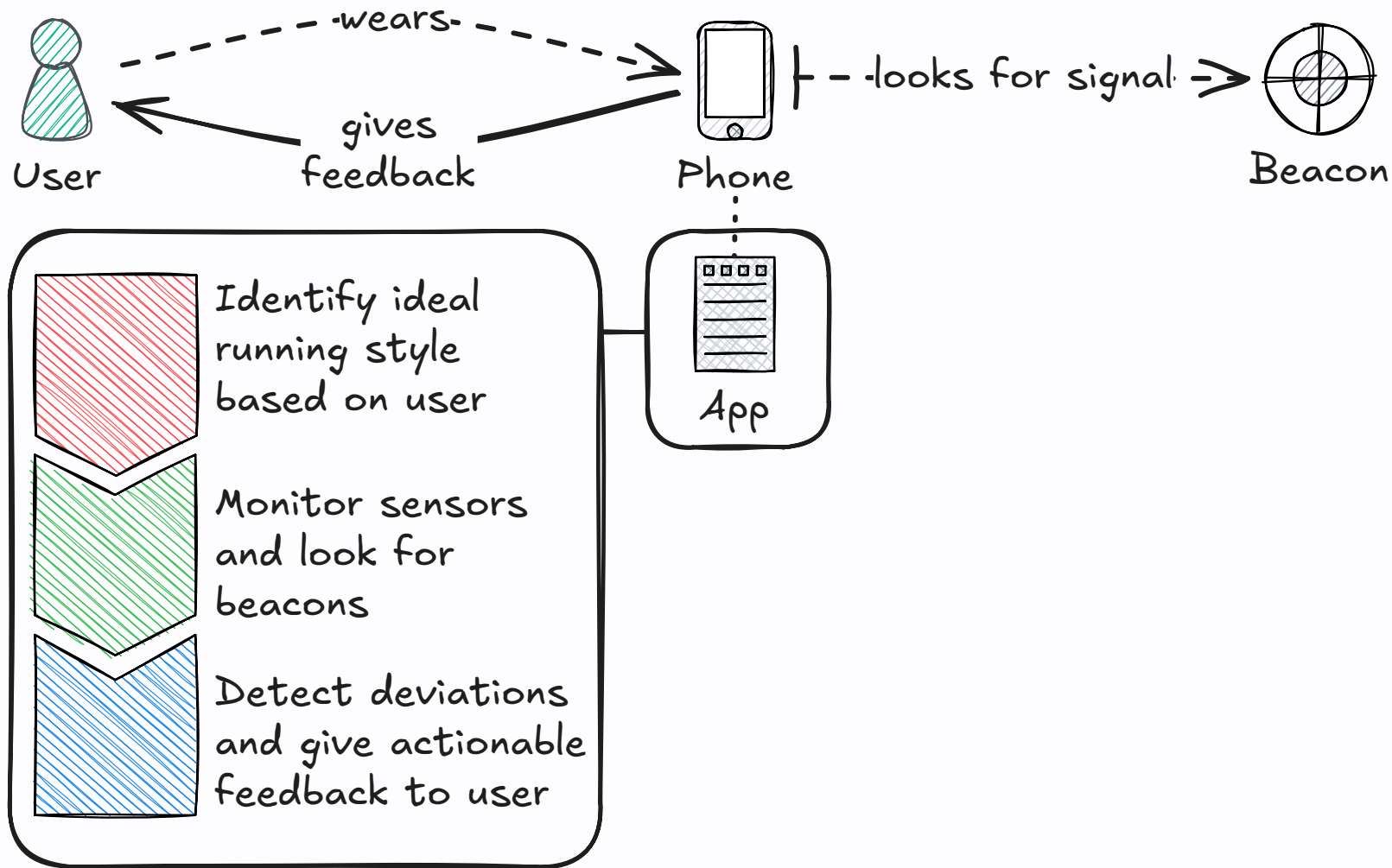
Name	Component
Huanbo Meng	Classifier training
Jinrui Zhang	Sensor data gathering
Luka Leer	Visualisation & presentation
Wahab Ahmed	Localisation

Quick recap

A **running app** that:

- adapts to **your unique running style** and helps you **stay consistent** when running **longer distances**;
- gives **real-time feedback** and **detects deviations** from **your ideal running style**;
- and uses **beacons as checkpoints** to **precisely track** your speed and segment time.

Architecture



Progress

We took a critical look at our plans.

Localisation

- WiGLE sadly does not fit our use-case
 - Too few data points
 - Not exact enough
 - Daily limits on API
- Passive localisation is also not reliable enough
- Solution: BLE beacons as checkpoints

To machine learn ...

- Can automatically detect the user's running style
- Requires less manual user interaction
- Can potentially fit a wider range of preferences

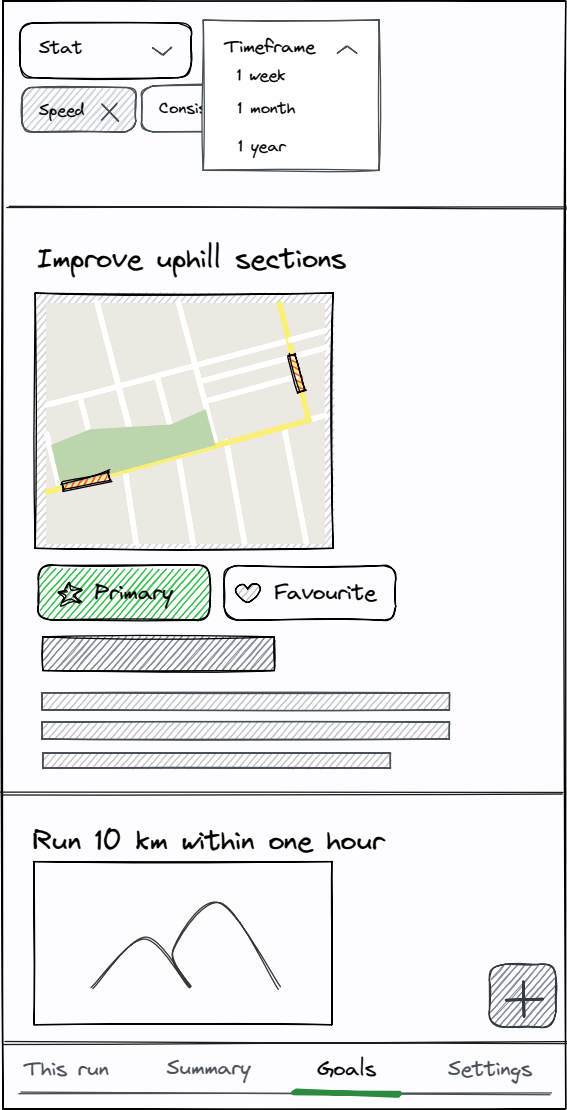
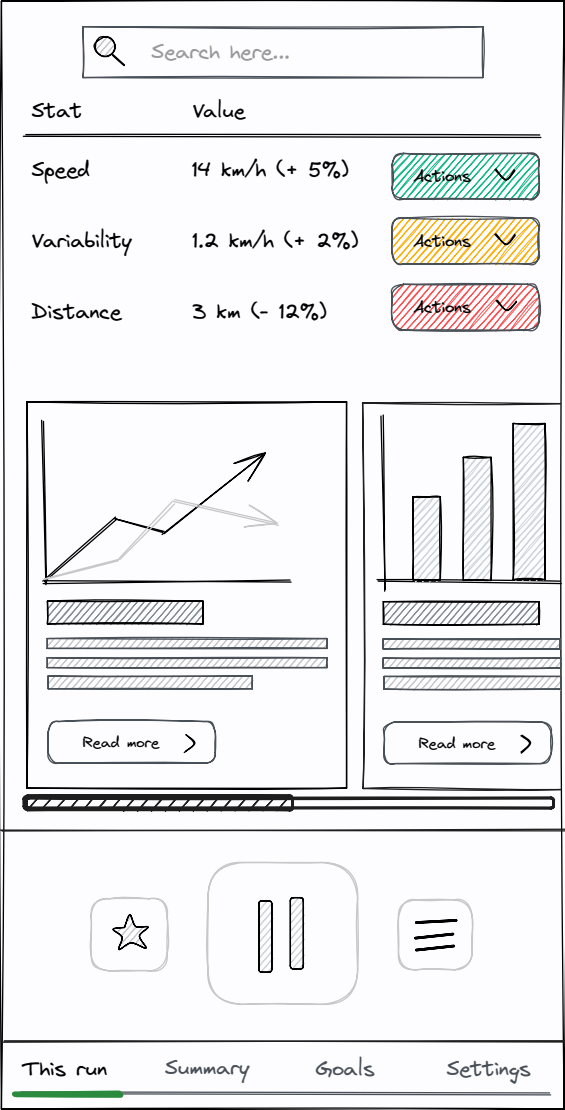
Or not to machine learn?

- Initial training made clear that we need a lot of data
- Requires initial runs before the app can be used
- Might not be worth the effort

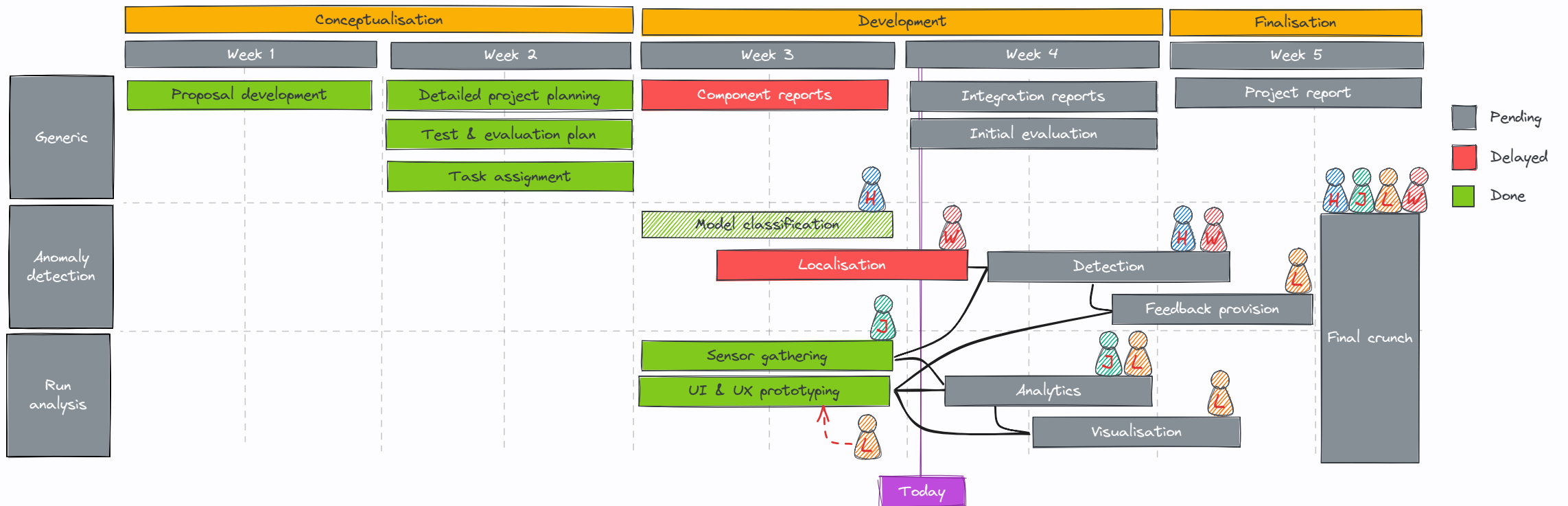
User interface & experience

- How to provide feedback to the user?
 - Auditory: only works with earbuds or headphones
 - Tactile: might not be noticeable
 - Visual: can be distracting
- What statistics to show?

Prototype



What's next?



Any questions?