

Various forms of technologies will be used to develop the NavUP system.

- 1) Web backend API, use AJAX as a form of communication to be used for information retrieval from the server once the device requests information from the server
- 2) Node can be used server side in replacement of the Apache from the AMP stack for a more dynamic server side request feel.
- 3) JS will be used in place of php to better work with Node
- 4) Mongo db can be used for database storage

- 1) System will rely heavily on a wireless connection which will be used to connect to the server locally
- 2) If no connection is available wirelessly, the mobile connection of the phone can be used to connect to the server

- 1) Android development can be developed in a Java environment utilising all of the interface elements java can provide for the android operating system developments
- 2) IOS development can be done through swift to stick to the native operating system environment as closely as possible

- 1) Libraries can be included from the various programming languages used to relieve some of the tedious coding (such as the built in data structures in Java)

- 1) Hardware optimisation will be focuses on ARM processors
- 2) Minimalistic resource use for the amount of RAM present on the system

- 1) Server needs to have both 2.4 GHz and 5 GHz wireless connection bands
- 2) Catering for all the various network wireless network protocols to ensure maximum device connectivity
- 3) Needs to send information relative to transfer rate speed available based on client connection type so that the server does not become a bottleneck