**Rough Project due 1 Aug**

**Final within 2 weeks**

**Phases:**

1. Data Collection
2. Data Organization
3. Data Visualization
4. Analysis
5. Solution (Web-map)

**Suzi**

1. Executive Summary
2. Budget

**Prudence**

1. Background
2. Overview of solution
3. Cover Page

**Brett**

1. High level non-functional requirements
2. Project success factors

**Keren**

1. Project Phases + deliverables (Gantt)
2. Scope and limitations

***Information:***

Group Name

-GIS in Motion

Program Name

-Move@UP

Project Topic

-Our project is investigating the mobility around Hatfield campus. This involves trying to ensure students get from one place to another as efficiently as possible, due to the 10 minute time frame between lectures. Rough ideas for the project include measuring human and bicycle traffic.

Target Audience

Up management + students

Datasets

* lecture halls
* foot traffic (measuring the number of people past a certain point)
* student surveys
* roads/paths in Hatfield
* bicycles that intersect with pathways

Solutions

* People taking alternate paths
* Implementing bike routes
* One ways (keep left)
* More maps around campus

***Project Phases***

| Data Collection | 3 August - 15 August |
| --- | --- |
| Data Organization | 15 August - 22 August |
| Data Visualization (Mapping) | 22 August - 12 September |
| Web Map (Coding) | 25 September - 23 October |
| Finalising Product | 23 October - 30 October |

* Data Collection
* Data Cleaning + Store it
* Analysis - QGIS
* Web Application - Python
* Geovisualization

**Data Collection**

The data collection process entails gathering the raw data necessary for this project. The main datasets we will be collecting are as follows:

* Foot Traffic: Foot traffic at specific points around the University of Pretoria Hatfield Campus will be collected. This will be done through counting the number of people passing a specific point over a specified time period. This data will be used to visually represent high foot traffic areas at the University of Pretoria Hatfield Campus.
* Bicycles intersecting walkways: The number of bicycles that intersect with walkways will be tallied. This is necessary for determining whether bicycle routes are needed at the University of Pretoria Hatfield Campus.
* Surveys: Surveys will be distributed to students at random, in order to gain a better understanding of student mobility. The survey will address issues such as tardiness, routes taken between lecture halls, and forms of transportation while on Hatfield campus.
* Roads/Paths: This dataset involves the roads and different pathways on the University of Pretoria Hatfield Campus.

Data Collection Tools

* Traditional and modern
* Tools

1. Qfield (on mobile devices)
2. Mergin maps (on mobile devices)
3. Handheld gps devices

Mobile device

* Easy to use
* Accuracy isn't that great
  + Use gps as backup
  + Verify and correlate mobile and

Things to consider

1. Data collection within hatfield campus and places adjacent to gates where necessary
   1. For safety
2. Plan before collecting data
   1. Assign roles for each person
3. Think about how you will use the data
   1. Storage
   2. Analysis
   3. Visualisation
4. Consider yours and your team’s safety
5. May not conduct interview - no authorisation
6. Make use of forms where necessary
   1. Permissions
7. Metadata
8. Interoperability