

# revised project skills

*by* Ian Flood

---

WORD COUNT	980
CHARACTER COUNT	4528

TIME SUBMITTED	13-OCT-2011 05:21PM
PAPER ID	207715595



## **ITB Parking APP**

And monitoring system

A new phone app for Android and Iphones to aid in reducing hassle while parking in the mornings.

ian  
10/10/2011

### **Project Scope**

The aim of this project is to create a parking app for android and Iphone which would work in conjunction with a new system that would monitor how many cars came in and out of the college that would be able to display how many free spaces there are via phone to any student or staff who had the app.

### **How would it work?**

The app would rely heavily on a means of recording the amount of cars currently in the parking lot like for instance an infra-red camera by the entrance to the car park which could record as cars enter and leave ITB automatically. The app would simply be a straight forward and clean looking GUI essentially that just relays to people who possess the app how many spaces there are currently left in the parking lot.

### **What is a successful project?**

The hopeful outcome of this program is that it would reduce the hassle of finding a parking space in the morning and reduce the issue of improper parking in the college thus benefiting both the student body but also making parking safer.

### **Critical evaluation.**

As the app would rely on monitoring the cars in the parking lot it is open to some form of failure, for example if the number of cars in the parking lot was miscounted then it would result in false information printed in the app.

Another issue could come in the funding for such a project. The creation of the app is not the main cost however as the more expensive issue would be producing a way to monitor the state of parking, and also implementing and maintaining it.

It should be noted that while it would aim to reduce the amount of cars always circling ITB looking for parking there is one issue with this that stands out more than anything, simply put not everyone owns either an Iphone or an Android so while those that do will be able to plan their journey ahead of time via the app, in other words decide rather or not to take the car or simply a bus those without an Iphone or Android would not be able to check ahead of time and so while reducing the congestion around the car park with would not eliminate it completely.

### **Problem prevention.**

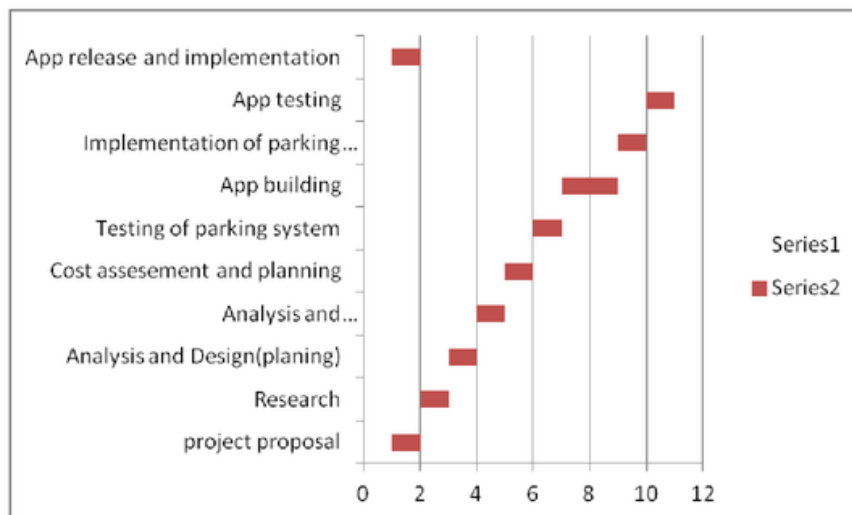
Both of the issues highlighted above revolve around the system of monitoring parking, both how reliable it would be and in how difficult or expensive it could be to set up.

The most reliable way I believe to monitor is traffic is simply with an automated camera post which would record the number of cars both entering and exiting the college during the day. By knowing how many spaces the car park can hold it would be simple addition and subtraction to determine, for the app, rather or not there are any free spaces and how many, if any.

On the issue of informing those who do not have Iphones or Androids about the number of spaces ahead of time one possible solution could simply be to also display this information somewhere on the ITB website homepage so that people can check before they leave home.

### **Work Breakdown Structure**

Week 1	Project proposal/ planning and scope document.
Week 2	Research on new parking systems.
Week 3	Analysis and design ( Planning).
Week 4	Analysis and design documentation.
Week 5	Cost assessment, Cost proposal.
Week 6	Testing of new parking system.
Week 7	App building.
Week 8	App building.
Week 9	Implementation of parking system.
Week 10	App Testing.
Week 11	App release and implementation.



### **Project Proposal**

I would like to propose developing an application for Android and Iphone which would aid students and staff at ITB in finding free spaces for parking around the campus in the mornings quicker. This application would be integrated with a new parking monitoring system which could tell how many available spaces their currently are in the parking lot and display on this on a handy and easy to read display on phones in order to save time looking for spaces in the morning time.

### **Feasibility**

As listed above the system would be comprised of two separate parts. The application for phones and the traffic monitoring system. The app itself could be built relatively quickly and cheaply within the time constraints mentioned above in the WBS.

As explained in the critical evaluation the traffic monitoring system would require some form of

hardware, e.g. and automated camera to monitor cars passing in and out of the college which would require funding and maintenance. However provided that funding could be secured I believe the system to be feasible.

### **What Benefits would this system provide?**

The new clamping system in ITB this semester has caused much commotion and frustration among students over finding a parking space during the day and more importantly, a space where they won't be clamped.

I believe that the system and app I am proposing would effectively work to tell students and staff ahead of time rather there is or is not a free space, and where thus helping to relieve some of the frustration involved in finding a spot and reducing the number of cars which can be seen during the afternoon and evening eagerly circling the campus looking for a place.

### **End Objectives**

- To aid in the implementation of a new parking system.
- Creation of a handy ITB parking app which would work in conjunction with the new car park monitoring system to help people find parking.
- To increase the efficiency of parking at ITB.
- To ease the hassle of finding parking at ITB and to make the commute easier for ITB motorists

GRADEMARK REPORT

FINAL GRADE  
/ 10

GENERAL COMMENTS

PAGE 1

PAGE 2

PAGE 3

PAGE 4