Team 7

Project Phase 1 Requirements & UI Design

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1. Decide your project topic (+5 points) 2

1.1. Android technology used: 2

1.2. Target Users 2

1.3. Search the similar applications from Google store or other Android application providers as your reference. For example your topic is to make your phone as a mouse through bluetooth, WiFi or USB, you should be able to find a lot of available such applications 2

1.4. Name 2

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3. Design /prototype your application user interface (+15 points) 5

3.1. , 3.2, and 3.4 - UI controls and screens as well as transitions are defined at the end of this document. 5

3.3 Prototype is attached. 5

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5. Submit project phase one deliverables including (+5 points) 5

5.1. Documentation covers all contents above mentioned 5

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7. Scoring (5 flying points) 6

7.1. All above items have to be reflected on your document which will be used for me or TA to score your work. 6

7.2. We have 5 flying points will be mainly offered to your prototype coding work. Scoring rules are simple. Top 2 teams will get 5 point, Top 4 will get 4 points. 6

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7.4. Based on the feedback, individuals might get up to -5 points for absent on team meeting, not much effort to contribute to team, no contribution on prototype package or so. 6

# Decide your project topic (+5 points)

## Android technology used:

Camera, data, google/plus api, email client, fragments, activities, intents, data providers, adapters.

## Target Users

* IIT Students

## Search the similar applications from Google store or other Android application providers as your reference. For example your topic is to make your phone as a mouse through bluetooth, WiFi or USB, you should be able to find a lot of available such applications

Applications such as Ebay, CraigList and Wallapop have similar features the the application we want to develope. We will need camera access, data (wifi, gsm data, etc), as well as access to the google/plus api and the email client.

## Name

IIT Bazaar

## Brief Description

IIT Bazaar was a craigslist type of application that was part of my.iit but was not well advertised. It became dysfunctional in 2011. This application will resurrect the Bazaar. The only users allowed will be those with an iit.edu email address. Similar to ebay, a listing can be made and would only last a week unless a user renews the listing. Users would be encouraged to remove objects that have already been sold. Unlike ebay, the listings are for items sold in a first come/first served with cash and carry payment system. A user will be able to see items listed and ending soon on the initial screen. They will also be able to search for items, watch certain items as well as create listing from their handheld. This includes taking pictures of the item, as well as using the UPC/NFC tag on the item to get a description.

1. **Collect Requirements (+15 points)**
   1. List all features or functionalities you can imagine which will be the requirements in your project.

The application should be able to contact the iit phonebook to get major

The application should be interface with the google api for validation and picture retrieval

The application should be able to store items remotely as well as locally

The application should have administrators that can remove offending listings

The applications should be able to list new items

The application should be able to display items in categories

The application should be able to query the database with keywords

The application should allow a user to disconnect their credentials

The application should only allow iit students, staff and faculty to connect

The application should allow a user to take a picture of an item

The application should allow a user to fill in details from a UPC or ISBN barcode

The application should be able to link to the physical world by QR code

The application should be able to interface with the email client to send an inquiry about a purchase.

A user should be able to unlist an item

A user should be able to share an item

A user should be able to follow an item

* 1. Comparing the closest applications you could find from Google Play Store to get you idea what kind of features already exists in their apps and what features you might want in your app.

We compared our application to eBay, wallapop and craigslist.

We really liked the flow of the eBay application but can improve on some of the design as well as use the craigslist model to list and transact items. We did like ebay ability to photograph an item as well as a barcode, but we can add a physical component where QR codes can be used to also link to items.

* 1. and 2.4

Key:

Required

Nice To Have

## 

BAZAAR-001 Search Function

Search remote database if data connection is present, otherwise search local copy.

BAZAAR-002 Search Result Listing

List all result in a fragment

BAZAAR-003 Search Results with images

Display miniature main/display image of item

BAZAAR-004 Search Result Sorting

Sort results by cost or end date or listing date (newest items)

BAZAAR-005 Shop and Sell Fragment

A fragment to switch between shopping and selling

BAZAAR-006 Display Item Page

A display of the item, ad or service being offered

BAZAAR-007 Horizontal Orientation

Horizontal device orientation

BAZAAR-008 Sell an Item

A user must be able to sell an item, create an item

This may require several fragments to create a node in the database.

BAZAAR-009 Take a photo

A user can take a photo of the item with their device

BAZAAR-010 Upload a photo

A user can upload a photo stored on their device

BAZAAR-011 Upload/Take multiple photos

BAZAAR-012 Scan a barcode

Scan a barcode and retrieve a description from an external public database.

BAZAAR-013 Categorize items

Allow items to have required entry parameters

BAZAAR-014 Sell a service (e.g. Tutoring)

A service does not require a picture

BAZAAR-015 Wanted ads

Put in ads of things wanted

BAZAAR-016 Allow on-campus businesses to list (e.g. 7-11 deals)

Can port a full page advertisement

BAZAAR-017 Locate an exchange location

Uses GPS to locate other user

GPS will turn on a certain time before exchange

BAZAAR-018 Schedule a time, date, location when a user will sell

Set this appointment in the calendar

BAZAAR-019 Data Store

A graph database called orientDB will be used as it allows easy addition of nodes.

BAZAAR-020 Remote graph database

A remote/hosted server will be used to hold the datastore.

BAZAAR-021 Local/Embedded graph database

A local copy of the remote database will be used if the remote is not available due an inability to connect for example.

BAZAAR-022 Allow a student to login/authenticate and store their profile

Only a student of IIT can browse/use this service. The user will log in once and will be logged out after a while.

BAZAAR-023 A user must have a picture

This will allow a seller to be found

BAZAAR-024 Find a user within close proximity

The phone will vibrate or ping though a local proximity system, backed by gps, as well as wifi and bluetooth if possible

BAZAAR-025 Administrator console

Moderators should be selected to manage the listing system

BAZAAR-026 Relist ad

Ability to have a listing re-listed

BAZAAR-027 Unlist ad

Ability to have a listing un-listed

BAZAAR-028 Save/dock ad

Ability to save an ad into a user's console, but not have it displayed. Such as a tutor going on vacation, etc.

# Design /prototype your application user interface (+15 points)

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## 3.3 Prototype is attached.

# Elevator pitch (+5 points)

## Done on 11/10/2015

# Submit project phase one deliverables including (+5 points)

## Documentation covers all contents above mentioned

this

## Prototype code package with apk

Prototype is attached

# Project phase manager (+5 points)

## Phase manager

Janusz Nosek

## Phase manager has to coordinate the work between members

Git server set-up to track code, google docs set up to track documentation

## Contact Details

[jnosek@hawk.iit.edu](mailto:jnosek@hawk.iit.edu) | +1 (312) 351-9912

## Phase manager will submit the final deliverables covered all required contents

Git repo and doc from google docs will be tar-ed up and uploaded to blackboard.

I set up a git repository on my home server as well as dynamic dns.

git clone [git@cs442.ddns.net](mailto:git@cs442.ddns.net):~/team7\_proj\_cs442.git

Documents are hosted on google doc:

<https://docs.google.com/a/iit.edu/document/d/1YXijH-TwZc3n2tzsO4WNVlVnRdVa74QOOoBlYq847gY/edit?usp=sharing>

# Scoring (5 flying points)

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