Team 7

Project Phase 1 Requirements & UI Design

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1. Decide your project topic (+5 points)

1.1. Android technology used:

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

1.2. Target Users

- IIT Students

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

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.

1.4. Name

IIT Bazaar

1.5. 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.

2. Collect Requirements (+15 points)

2.1. 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

2.2. 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.

2.3. 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.

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

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

3.3 Prototype is attached.

4. Elevator pitch (+5 points)

Done on 11/10/2015

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

5.1. Documentation covers all contents above mentioned

this

5.2. Prototype code package with apk

Prototype is attached

6. Project phase manager (+5 points)

6.1. Phase manager

Janusz Nosek

6.2. Phase manager has to coordinate the work between members

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

6.3. Contact Details

jnosek@hawk.iit.edu | +1 (312) 351-9912

6.4. 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:~/team7_proj_cs442.git

Documents are hosted on google doc:
https://docs.google.com/a/iit.edu/document/d/1YXijH-TwZc3n2tzsO4WNVlVnRdVa74QOOoBlYq847gY/edit?usp=sharing

7. Scoring (5 flying points)

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Follow
Unfollow
Adds to watch/follow list
Icon text will change
Unfollow will remove from follow list
Opens email with prefilled message about purchasing and addressed to seller
Opens Email with barcode attached in png and .svg
Forces a resync with internal DB
[Done automatically at some interval if data network available]
Search IT Bazaar
Buy
Sell
Ending
Categories
IT Username
Home
Following
Selling
Log Out
Help
Opens email client with address to help/support/admin
IT Bazaar
Login
Keep me signed in
Logon Failure
Logon Success
Login information cannot be verified
(Optional reason (e.g. no network)
Unfollow
Widget A Title
Price
End Time
[Category]
Description
Length ≤ 100 Character max
Follow
Buy
Share
[Specifications]
Quantity
Manufacturer
Model
UPC
Seller Username (Items sold)
Percentage feedback
See sellers other items
First Name
Last Name
Major Level
Contact
Feedback
(###)
Items for sale
Opens Email
Furniture
Appliances
Books
Widgets
Sprockets
Cogs
Item
Service
Scan UPC
Scan ISBN
Scan a QR Code
Tutoring
Entered Title
Add Photo
Remove Photo
Source of Photo
Gallery
Take A Picture
Android Gallery
Add Modify Category
Specifications
Add Specification
Remove Specification
List
Condition
Size
Color
UPC
Weight
Year
Used
Big
Blue
12344867
10.6g
1966
Remove
Type A Category
Car
Book
Furniture
Lamp
Next
Enter Specification Keyword
Make
Model
Version
Enter Specification Value
Green
Brown
Red
White
Entered Service /Title Name
Major Concentration
Category
Enter Price
Enter Description
Time
Date
Class
Section
Enter Specification Keyword
Service Type
Subject
Study
Availability
Enter Specification Value
C5442
C5422
C5540
C5440

Bazaar Activity
Toolbar
Buy
Sell
Buy/Sell Fragment
Buy/Sell Bulk Fragment
Search Frag
Search Results
Listing Frag
Relative Layout
Layout
Fragment
Inner List (TextView)
Buttons Fragment
Causes Fragment to Shift
Listing Frag
Sell title Enter Frag
Q Blob
Sell in! Fragment
Comm Fragment
Sell Fragment
Button Frag