PROJECT PROPOSAL

IN721 Mobile 2017 – Main Project

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Project Statement

The Shopping Wish List will be the project implemented as part of the IN710 Main Project. The application will allow a user to store an image, with supporting information, of a product they may wish to acquire at a later date. This information, once stored will be able to be retrieved for future viewing.

Functional Requirements

The User Shall:	The System Shall:
On opening the application, see a splash screen with the application logo and name.	**Launch the splash screen activity.**
Be able to either wait for the splash screen to end, or touch the screen to advance to the next screen.	**On touch, run the Intro Screen activity. Otherwise run a timer in an aysnc task that executes the start activity after the timer has executed.**
Be able to, in the Intro Screen, view the most recent items they have added to the application.	**Fetch all items stored in the built in sqlite database. Then parse the retrieved information into product item class stored in a list data structure. The list will then be bound to the list view via an adapter.**
Be able to, in the Intro Screen, touch the Add Item button to transition to the camera app.	**Start the Add Item activity which will then start the image capture activity for result.**
Be able to, in the Intro Screen, touch the View Items button to transition to the View All Items Screen.	**Start the View All Items activity and background the Intro screen.**
Be able to take a photo of a product using the camera app after touching the Add Item button in the Intro Screen.	**Finish the activity that was started for result returning the image information.**
Be able to enter text in the Add Item screen indicating the item name, the vendor where the item can be purchased, and the price of the product after taking a photo in the camera app.	**Allow text to be entered into the corresponding edit text fields.**
Not be able to save the item and advance from the Add Item screen unless all the item name, vendor, and price have been entered.	**Use regex expressions to test the strings in the edit text fields, making sure the input is valid. Then enable the button if all requirements are met.**
Be able, in the Add Item screen, to optionally add notes about the product by touching the notes button and typing via the onscreen keyboard in the text field in a pop up dialog.	**On button click, start a dialog that holds an edit text view and allows the user to enter text.**
Be able to, after the add item process has been saved, see a list of all the items the user has added, as well as see feedback indicating the save was successful.	**On save button click, commit the user input information to the sqlite database. Then retrieve an updated list of product items, displaying them in the list view. A text view will be populated with a message indicating success (or failure) of the product being saved.**

Be able to, in the View All Items screen, type text into the search text field indicating how they would like to filter the list of items that appears on the screen.	**Allow the user to enter text into the edit text view.**
Be able to, in the View All Items screen, touch the go button to initiate a filter of the text they have typed in the search text field.	**On go button click, run methods passing in the input string.**
Be able to, after the go button has been pressed in the View All Items screen, see a list of items that are relevant to the search string.	**Use regex expressions to determine the users search intention. E.g if they have entered "ad" any product that contains the pattern "ad" in the title.**
Be able to, in the View All Items screen, touch the Add New button to transition to the Add New Item screen and camera app.	**Start the Add Item activity which will then start the image capture activity for result.**
Be able to, in the View All Items screen, touch the built in phone back button to return to the Intro screen.	**Finish the current View All Items activity.**
Be able to touch a product item in any of the list views displaying the items the user has entered to transition to the View Single Item screen, displaying the chosen item.	**Start the View Single Item activity passing through the product pk. The specific product information will be retrieved from a list and the fields will be populated with the data.**
Be able to, in the View Single Item screen, be able to view and edit the text fields displaying the product information.	**Allow the user to enter and alter text edit text views.**
Be able to, in the View Single Item screen, be able to touch the notes button and type via the onscreen keyboard in the text field in a pop up dialog.	**On button click, start a dialog that holds an edit text view and allows the user to enter text.**
Be able to, in the Notes dialog, touch the Save button to save the text they have edited.	**Commit change to database and dismiss the dialog.**
Be able to, in the View Single Item screen, touch the product image and see a larger version of the image in a dialog.	**Display dialog containing product image in an image view.**
Be able to, in the View Single Item screen, remove the item by touching the Remove button and transition to the View All Items screen.	**Remove the product from the database and retrieve an updated list of products from the database passing it to the View All Items activity.**
Be able to, in the View Single Item screen, save the edited information by touching the Save button.	**On save button click, commit the user input information to the sqlite database. Then retrieve an updated list of product items, displaying them in the listbox. A textview will be populated with a message indicating success (or failure) of the product being saved.**

Web Services

No web services will be required for this project.

Required On-board Hardware

The application will require the use of the following phone hardware components:

- Camera
- HDD

Wireframes