



Team Project

Fall 2011 - COP 4655

Asset Management App: Requirements

1. The app uses the iPad camera to scan QR Codes and retrieve equipment id. Use zxing open source library.
2. The app maintains an internal data structure to represent the equipment records consisting of: Equipment ID (10 digits), Equipment Description (100 chars), date last scanned, location (25 chars), and image.
3. The app updates existing equipment records with date scanned and picture of equipment.
4. New equipment scanned can be added to the list of equipment records.
5. The equipment records are archived to a file.
6. The app provides a list of equipment records.
7. The app provides a detail/edit view of each equipment record
8. The app provides a means to delete an equipment record
9. The app can search and retrieve an equipment record by id number.

Use Case I

John uses the app to scan computer equipment in the lab. He launches the app, selects scan from the tab bar and scans the QR code on the equipment. The app identifies the equipment id and shows John the equipment record in detail view, automatically updating the last scanned date. John chooses to take a picture of the equipment by selecting a button next to the picture field. The system shows John the picture and stores the image taken in the equipment record.

Use Case II

Next, John scans the QR code on the next computer in the lab by selecting the scan button on the tab bar. The app does not recognize the id and offers to create a new record for him. John answers yes. The app provides him with the edit view populated with the id. John completes the other fields and takes a picture as before.

Use Case III

John starts the app and is presented with the list view showing all equipment records listed by ID number and description. He selects one equipment list row and is shown the detail view. He returns to the list view by selecting List in the tab bar. He selects the “+” button from the toolbar and the system presents him with a new equipment record he can complete.

Implementation Requirements

- You must use at least two of the following:
 - Table View
 - Navigation View
 - Toolbar
 - Tab Bar
 - Split view controller
- To prevent data loss, you must archive the equipment records before the application exits so they can be retrieved when the app is restarted
- You must have at least one model class used to manage the equipment records.
- You must comment each class file and method describing the purpose and logic of the code.
- You must download and use the zxing source code for iPhone available here:
- <http://zxing.googlecode.com/svn/trunk/>
- From Organizer, select Repository, then “+” in lower left corner, select Check out/Clone repository.
- You will find xcode projects in “iphone” directory: scantest and barcodes

Test Data

- Create a database of 20 records.
- You can generate QR codes using xzing's QR code generator from link on this page:
<http://code.google.com/p/zxing/>

Team Member Responsibilities

- Design and implement application as a team
- Take turns coding classes. Document classes/ methods with initials when created or significant edits done
- One person behind the keyboard, the other(s) assisting.
- Document meetings, time spent, and work accomplished by each team member

Deliverables

- Assignment due Thursday Dec. 8th at 11pm. No extensions
- Your zip file will contain your Xcode project
- A spreadsheet which contains a log of your development meetings, attendance, time spent, and a brief description of the work accomplished during the meeting (research, design, code, test)
- A simplified class diagram documenting your implementation.
- A five minute or less demo video recorded by using the iPad video recorder which reviews the features of the application
- Use your team # and the project to name your zip file and Xcode project, eg., Team1AssetManagement

Team Assignments

Team 1: A Perez Broche

Team 2: HoChoy, K Perez

Team 3: Molero, Alpizar

Team 4: Romulus, D Perez