**Inventory System for Minor and Major Equipment Design Project**

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**The goals of the project are to**: I) have the ability to read barcodes through a phone’s camera, utilizing the high resolution imagery that will link to equipment’s ID, II) have the app run across multiple platforms including Android, IOS, and website, III) create and maintain a database to store equipment information such as ownership, condition, location, etc., IV) create an auditing excel document to showcase all the current data for the equipment on hand, V) back up data at regular intervals, VI) connect with the current administrator that controls the inventory system to see where it needs improvement.

**Design Merit:** Currently the computer science department keeps track of its inventory in a series of excel documents. This makes the tracking and auditing of inventory difficult, increasing the chance of misplaced inventory or the loss of inventory data. By moving this information to a database, we will simplify the access issues associated with having the information in one file, while decreasing the chances of data being lost. In the past decade, high quality cameras have become standard on phones which has made it possible for a user to scan barcodes without the aid of an external device. By leveraging this new technology, we can create a companion app that will allow users secured, yet simple access to the database while making it simple for them to update a piece of inventory’s status by scanning its barcode.

**Broader Impact:** Once in place, this project should make tracking who is using inventory, what inventory is being used for, and where inventory is, easy within the computer science department. It also carries the potential to be used university wide potentially making equipment sharing between departments simple.

**Approach:**