**Requirements Analysis**

Existing system:

* Inventory management system for a company that loans out filming and video equipment.
* Current system uses proprietary software that is local to the computers used onsite.
* Physical barcode scanners are used to scan out items in inventory.
* Administrators (business management) and normal users (business staff) can only log in to the system and view data locally.
* Customers have to call in with enquiries about inventory and borrowing requests.
* Ticketing system operated manually by staff, for borrowing requests and input requests into the system after conversing with customers on the phone.

Improvements to be made:

* Develop a website that allows administrators and normal users to log in and view inventory, log removal of stock (scan out equipment) and process ticketing requests.
  + Administrators can log in to log addition of new inventory by adding a QR code to the system for new inventory.
  + Staff can scan out equipment by using a QR code scanner that links to a website.
* Website allows customers to also log in and view what inventory they can loan out and create a ticket request to do so.
* Business users and customers login into the same website but see different pages for their specific use cases.

Questionnaire:

Questionnaire in regards to the current system and the improvements proposed.

1. What functionality is missing from your current system?
2. What features do you like about the current system?
   1. What could be improved about these features?
3. What features do you not like about the system?
   1. Would you prefer removing these features or improvements?
4. What could make the system more efficient in day to day tasks?
5. What problems have you had with maintenance in day to day usage?
6. Is the use of Ticketing through a website a benefit to the overall system?
   1. If not, what alternative do you propose?
7. Would the use of a website be an improvement?
   1. What features would you like to see if a website was implemented?
   2. Is there any functionality that would not be improved/ be made worse by using a website?
8. What are your thoughts on the current data representation for the inventory?
   1. Is there any way the data could be presented in a more useful way?
   2. Are there any features missing from the visualisation of the inventory data?
   3. What data analysis feature would you like to see added to the system?
9. What improvements can be made to the ticketing system?
   1. Would a website be beneficial in improving the ticketing system?
   2. What features would you like to see removed/added?

**Functional Requirements:**

Website Functionality:

Administrative User (Business Staff):

* Sign up for an Administrator user account.
  + Unique User ID
  + Full Name
  + Position in company
  + Create Username
  + Create Password
* Login to a normal user account.
  + Login in with Username.
  + Login with Password.
* See inventory numbers.
  + Inventory stored in a table.
  + Can be categorised using the headers.
  + Headers-Categorisation: Name-Alphabetical, Type-Alphabetical(?), Amount-Numerical (Ascending/Descending).
* See user request tickets to borrow equipment.
  + View request page/tab.
  + Requests appear chronologically.
  + Page shows summary of each request in table; Customer Name, Company, Requested Item, requested amount, Status (Resolved/Unresolved)
  + Each row (or request) linked to a new page with full details of request (including text).
* Respond to the user ticket, via message.
* Respond to the user ticket with a confirm/deny button.
* Process removal of inventory by accepting ticket requests

Customer:

* Sign up for a customer account.
* Login to customer account.
* See ticket request page, make a request ticket.
  + - Input Name, Company.
  + Input type of equipment needed.
  + Input length of time equipment needed for.
  + Enter the amount of each type of equipment needed.
  + Pay for requested rental.
  + Can make multiple requests for different types of equipment in one ticket.

Database:

* Database logs all inventory.
* Databases updates with changes in inventory – after ticketing request for item borrowing confirmed.
* Database accessed by website to get inventory data and display on website.

**Non-Functional Requirements:**

Website Interface:

* Tabs – Upon login - Easy User Interface, one main page, all functionality accessible on page by tabs. Accessible to administrator and Normal Users to view all tabs.
  + Inventory overview – Table with all inventory.
  + Ticketing – Tab with all ticketing functionality.
* Easy User Interface, all functionality accessible on one page by tabs.
* All account details should be stored in the database securely.