**Projects for Alpha batch:**

1. A Grocery shop is interested to maintain the list of Items being sold in the group. There are a set of categories include Grocery, Vegetables, Fruits. Each category has a set of Items. Each item is identified by the item code, item name, and item quantity and item rate.

Each category is identified by category code and category name.

You need to develop an application that helps the user to

* View the categories
* View the list of items in each Category
* On searching a particular item it needs to display back the entire details of the Item.
* \*\* Identify more requirements

1. A Librarian is interested to maintain the list of Books and Journals kept in the Library. There are a set of categories include Technical, Fictions, English Grammer etc. Each category has a set of Books or Journals. Each book is identified by the book code, book name, book quantity and book rate. Each Journal is characterized by the journal id and year or month of publication.

Each category is identified by category code and category name.

You need to develop an application that helps the user to

* View the categories
* View the list of books or journals in each Category
* On searching a particular book it needs to display back the entire details of the book.
* \*\* Identify more requirements

1. An Auditorium hosts different events. Customer can purchase tickets for each event. There are a set of categories include Drama, Dance, Music etc. Event details include event category, event name, event id, date of event. The ticket details include ticket id, no of seats, ticket rate. You need to develop an application that helps the user to

* View the Events
* Search for an event in a particular category
* Viewing the ticket details for an event.
* \*\* Identify more requirements

1. A booking system need to be implemented. Purchasing a ticket for a specified bus route. The ticket details include ticket id, no of seats, ticket rate, source and destination. The route is designated by the source, destination, date of journey, bus names. You need to develop an application that helps the user to

* View all the routes
* Search and view a particular route
* View the details of the ticket for a particular route.
* \*\* Identify more requirements

1. A Bank maintains a set of accounts for a different set of customers. Accounts are characterized by the account id, holder name. Bank is characterized by the bank id, bank location. You need to develop an application that helps the user to

* View the details of the bank
* View the details of the Account in the bank
* Search and display the details of a particular account.
* \*\* Identify more requirements

Find below the 1 liner topics for all the batches.

  Group 1  : **Online Library Management System**

  Group 2  : **Online Grocery Management System**

  Group 3  : **Online Banking System**

  Group 4  : **Online Auditorium Booking System**

1.       Let them analyze on these topics and come out with the different operations under each of them. They need to list them down. Only the essential features need to be incorporated first. Additional features can be added based on time.

2.       They need to initiate on the Project design as the starting Phase which will include the following :

**a.**       **Use Case Diagrams**

**b.**      **Class Diagrams**

**c.**       **Interface diagrams**

**d.**      **Sequence Diagrams**

*\*\*  The timeline for the initial design document will be 5 days.*

    About Technologies :

        Outer Tier or Presentation Layer

         GUI :  **HTML5.0, JavaScript and AngularJS**

        Middle Tier or Business Logic

         Webserver :  **Tomcat 6.x**

         Application Server :  **JBOSS**for implementing**EJB**

         Business Logic**: To be implemented in the session bean in EJB**

          Business Logic Programming : **Core Java** – **Exception Handling,  IO package and Collections Framework**

       Inner Tier  (Data Layer)

         Database :  **Oracle  - connected VIA the entity bean in EJB**

  Note :

1.       The project should have effective packaging

2.       All custom exceptions should be managed in packages

3.       Please stick to the coding standards

4.       Proper validations must be maintained in the UI pages

5.       Reusability of code must be promoted wherever possible.

6.       Kindly ensure that the look and feel of the UI Pages are professional.