# Gift registry creation and sharing web application

## Group Name: 404 Not Found
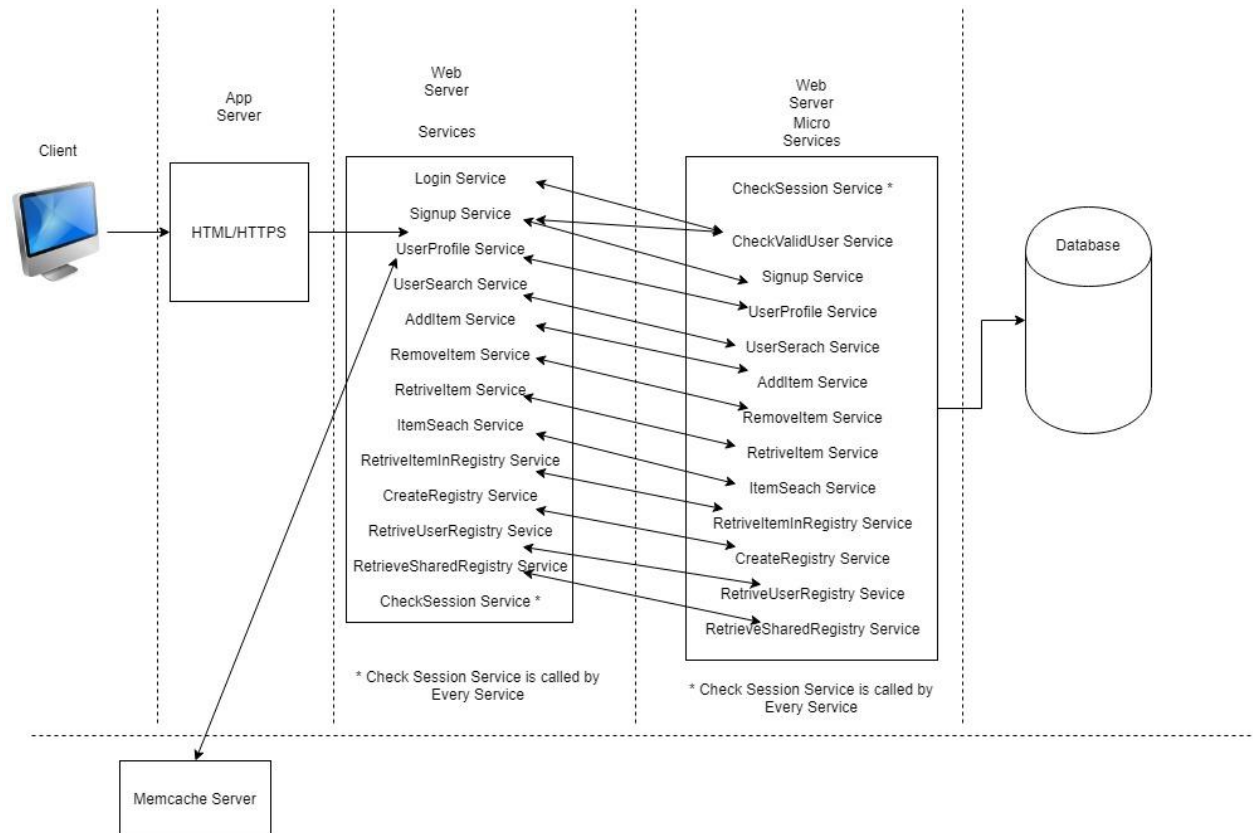
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# 1. Architecture Diagram



Client

App
Server

HTML/HTTPS

Web
Server

Services

Login Service
Signup Service
UserProfile Service
UserSearch Service
AddItem Service
RemoveItem Service
RetriveItem Service
ItemSeach Service
RetriveItemInRegistry Service
CreateRegistry Service
RetriveUserRegistry Sevice
RetrieveSharedRegistry Service
CheckSession Service *

* Check Session Service is called by
Every Service

Web
Server
Micro
Services

CheckSession Service *
CheckValidUser Service
Signup Service
UserProfile Service
UserSerach Service
AddItem Service
RemoveItem Service
RetriveItem Service
ItemSeach Service
RetriveItemInRegistry Service
CreateRegistry Service
RetriveUserRegistry Sevice
RetrieveSharedRegistry Service

* Check Session Service is called by
Every Service

Database

Memcache Server

## 2. Technologies and Libraries
### a. Client Side
 **i.** Framework: Angular Version 5, Bootstrap
 **ii.** Languages: HTML, CSS

### b. Server Side
 **i.** Framework: Jersey
 **ii.** Languages: Java
 **iii.** Libraries: JSON, GSON, ASM, JDBC, HTTP Servlet

The Project was built in:
1. Eclipse Neon 3 Java Enterprise Edition for Server Side.
2. Visual Studio Code for client side.

## 3. Project Functionalities

a. Regular User
   i. Signup: User can Register himself by filling the registration form.
   ii. Login: User can login by providing email and password.
   iii. Forgot Password: User can change password by clicking the forgot password link provided on the login page and answering the security question, if he forgets the password.
   iv. Profile Editing: User can edit profile by clicking the profile link provided in the dashboard.
   v. Create Registry: User can create a registry by following steps:
      1. Click on Create Registry link on the dashboard.
      2. Enter a name for the registry in the text box.
      3. Click on public if you want the registry to be public. If you click private radio button you can search and add users with whom you want to share the registry.
      4. Search for the items you want to add into the registry. Click delete if want to delete an item.
      5. Click create registry when you are done.
   vi. View Registry: By clicking the "My Registries" link on the dashboard user can view all the registries created by user. On clicking the registry, user can view all the items in the registry and view the users who have self-assigned the items. User can also self-assign an item that has not been self-assigned yet.
   vii. View Shared Registry: By clicking the "Shared Registries" link on the dashboard user can view all the registries shared with the user. On clicking the registry,

user can view all the items in the registry and view the users who have self-assigned the items.

    viii.   View Items: User can view the list of all items and filter the item.

    ix.   Logout: User can logout from the system.

b. Admin User
    i.   Login: User can login by providing username and password.
    ii.   View Items: View all items in the registry.
    iii.   Add Item: Add item into the registry.
    iv.   Remove Item: Remove item from the registry.
    v.   Logout: Logout from the system.

4. **Services and Microservices**
   a. **Signup service:** This service is called when the user registers himself.
      i. Check Valid User Microservice: The above service first calls this service to check if the user already exists in the database and return a response.
      ii. Signup Microservice: If the user is valid, then this service is called to add the user to the database.
   b. **Login service:** This service is called when the user logins himself.
      i. Check Valid User Microservice: The above service calls this service to check if the user is already there in the database and return a response.
   c. **User Profile Service:** This service is called when user wants to view his profile.
      i. User Profile Microservice: The above service calls this service to get the profile information of the user from the database.
   d. **User Search Service:** This service is called when user wants to search another user.
      i. User Search Microservice: The above service calls this service to get the usernames of all the user that match the search text from the database.
   e. **Add Item Service:** This service is called when user wants to add an item.
      i. Add Item Microservice: The above service calls this service to add the item to the database.
   f. **Remove Item Service:** This service is called when user wants to remove an item.
      i. Remove Item Microservice: The above service calls this service to remove an item from the database.

g. **Retrieve Item Service:** This service is called when user wants to search for an item.
    i. Retrieve Item Microservice: The above service calls this service to retrieve all the items from the database.
h. **Item Search Service:** This service is called when user wants to search for an item.
    i. Item Search Microservice: The above service calls this service to get the items from the database that match search text.
i. **Retrieve Item in Registry Service:** This service is called when user wants to view a Registry.
    i. Retrieve Item in Registry Microservice: The above service calls this service to retrieve items from the database that are there in the requested registry.
j. **Create Registry Service:** This service is called when user wants to create a Registry.
    i. Create Registry Microservice: The above service calls this service to add registry details to the database.
k. **Retrieve User Registry Service:** This service is called when user wants to retrieve his Registries.
    i. Retrieve User Registry Microservice: The above service calls this service to get all the registries created by the user from the database.
l. **Retrieve Shared Registry Service:** This service is called when user wants to view all shared Registries.
    i. Retrieve Shared Registry Microservice: The above service calls this service to get all the registries shared with the user from the database.