## CO324 Lab 2: Dynamic Content Generation

## **Outcomes**

At the end of this lab you should be able to,

- Create simple web applications using Java Servlets
- Recognize how to configure servlets and map URLs using Servlet 3.0 annotations
- Use appropriate HTTP response codes to signal errors.

## References

- A quick guide to servlets
- Servlet form handling
- Using Servlet 3.0 annotations
- Servlet annotation examples

## **Exercises**

Create a simple web application to search a contact in a shared address book stored on the server. A client may search for contact details by name in the address book.

Begin by creating a java web application in your IDE by importing the skeleton code provided. Then, implement the address book search by doing the following.

- 1. Create a servlet class and configure it using servlet annotations in the project skeleton. Set servlet name and URL patterns correctly.
- 2. At servlet initialization, read a csv file containing all contact information in the servlet class (In the provided skeleton, addressBook.txt is the CSV file). For this, provide init parameters using annotations to specify the filename you want to read. (Refer to given resources.)
- 3. In the search.html form provided, use HTTP GET requests with 'name' as the query parameter. Direct GET requests triggered by form submission to the servlet class that you wrote
- 4. Process the HTTP request using the search functionality you implemented for the previous lab, display and return the details of the contact.
- 5. If the contact search fails (i.e. name is not known), what HTTP response code should the servlet return?