

**Benyam Hadgu Gebru**

**Email:** [benyamhadgu@gmail.com](mailto:benyamhadgu@gmail.com)

**Git location:** <https://github.com/benyamhadgug/PhaseThreeProject.git>

## Table of Contents

Features of the System .....	1
Application Layers.....	1
Concepts Used .....	1
Database Used .....	2
How to use the system .....	2

## Features of the System

The spring application has the following features:

- CRUD operation for users
- CRUD operation for product categories
- CRUD operation for Products; here product is related with category in such each product belongs to utmost one category.
- CRUD operation for Purchases
- Report that shows purchases by user filter.

## Application Layers

The application is divided in two the following components, each with distinct known function in spring world:

- Entities
- Services
- Controllers
- Repositories

✓ These components are realized by package structure in the project.

## Concepts Used

- DI
- IOC
- Thymeleaf
- JPA

- Error handling
- Java Stream
- MvcConfiguration
- OneToMany entity relationship
- ManyToMany entity relationship

### Database Used

In memory database- H2 was used for this application.

### How to use the system

As the system uses H2 as persistence system, using entails entering data. The following should be the order the entities should have their data entry:

1. Add list of Users
2. Add list of Categories
3. Add list of Product
4. Add list of Purchases