**Concepts used in academy applications:**

1. JpaRepository:- It is a JPA specific repository It is defined in Spring Data Jpa. It extends the both repository CrudRepository and PagingAndSortingRepository.
2. MySQL:- MySQL is a relational database management system based on the Structured Query Language, which is the popular language for accessing and managing the records in the database.
3. Spring Boot DevTools: - DevTools stands for Developer Tool. The aim of the module is to try and improve the development time while working with the Spring Boot application. Spring Boot DevTools pick up the changes and restart the application.
4. JSP:- JSP technology is used to create web application just like Servlet technology. A JSP page consists of HTML tags and JSP tags. The JSP pages are easier to maintain than Servlet because we can separate designing and development. It provides some additional features such as Expression Language, Custom Tags, etc.
5. Spring Boot Annotations:- Spring Boot Annotations is a form of metadata that provides data about a program. In other words, annotations are used to provide supplemental information about a program. It is not a part of the application that we develop.
6. Lombok: - It generate getters and setters getters and setters, constructor and a toString() automatically by using its annotations.

**Algorithm:**

1. Create Spring boot project
2. Create models classes for User, Product, ProductCategory, PurchaseItem, PurchaseOrder, CartItem.
3. Create Repository classes for User, Product, ProductCategory, PurchaseItem, PurchaseOrder, CartItem..
4. Create Services classes for User, Product, ProductCategory, PurchaseItem, PurchaseOrder, CartItem..
5. Create Controller classes for User, Product, ProductCategory, PurchaseItem, PurchaseOrder, CartItem.
6. Create Email Validator Class.
7. Create JSP & link to the controller class.