1. **Set Up the Project:** Created a Dynamic Web Project in Eclipse and configured it as a Maven project to manage dependencies and build configurations.
2. **Developed Java Classes:** Created two main classes, Participant and Batch, to model the gym instructor's data.
3. **Designed Servlets:** Developed two Servlets, one for managing Participants and one for managing Batches, to handle HTTP requests and responses.
4. **Created HTML Pages:** Built various HTML pages for user interaction such as adding, updating Participants and Batches, and a Welcome page with a Navigation menu.
5. **Database Creation and Configuration:** Created a MySQL database and tables to store Participant and Batch details. Configured JDBC dependencies in the Maven project to connect with the MySQL database.
6. **Implemented DAO Design Pattern:** Established a DAO (Data Access Object) design pattern to separate low level data accessing API or operations from high level business services.
7. **Developed Repository Class:** Created a Repository class that uses DAO to interact with the database, performing CRUD operations.
8. **Implemented CRUD Operations in Servlets:** In both ParticipantServlet and BatchServlet, implemented CRUD operations using doGet (read), doPost (create), doPut (update), and doDelete (delete) HTTP methods.
9. **Created JSP Pages:** Developed JSP pages to display the list of Participants and Batches, and to view Participants in a specific Batch.
10. **Project Build and Run:** Built and ran the project on the Apache Tomcat web server to ensure its proper functioning.
11. **Validation and Packaging:** Validated the working of the project, ensured that it met the requirements. Finally, packaged the project as a JAR file using Maven's package goal.

This project helped in gaining a practical understanding of Java Enterprise development, web-based Java programming, database connectivity, DAO patterns, Servlet, and the usage of Maven as a build tool.