

# Technical Proposal Report

## Todo Application

### 1. Introduction:

The goal of the Todo List Web Application is to give users an intuitive interface so they can effectively manage their activities. Task data will be saved by the application in XML format for convenient manipulation and retrieval. The program can be accessed from any device with internet connectivity by users using a web browser.

### 2. Project Description:

Users will be able to effortlessly manage their chores with the help of the proposed web application. It is possible for users to add new tasks, mark tasks as finished, modify task information, and remove tasks as necessary. Task data will be exchanged and stored by the program using XML data storage.

### 3. Target Audience:

This application is intended for people, professionals, students, and teams who require a systematic approach to task management. It serves everyone looking for a productive way to organize and prioritize their everyday tasks.

### 4. Main Functionalities:

- Task Management: Users can create, view, update, and delete tasks.
- Task Completion: Mark tasks as completed to track progress.

### 5. Architectural Overview:

- Front-end: Java Server Pages (JSP) are used in development to generate dynamic web content.
- Back-end: Business logic and HTTP requests will be handled via Servlets.
- Data Storage: Task data will be exchanged and stored in the XML format.
- Application deployment will take place on a Servlet container, such as Apache Tomcat.

## 6. Technologies and Tools:

- IDE: IntelliJ IDEA/ Eclipse for Java development.
- Version Control: Git for version control and collaboration.
- Testing Framework: JUnit for unit testing servlets and other components.
- XML Processing: JAXB (Java Architecture for XML Binding) for reading and writing XML data.

## 7. Project Timeline:

- Week 1: Setup project environment, create project structure.
- Week 2: Develop task management functionalities.
- Week 3: Finalize user interface design and conduct testing.
- Week 4: Deployment and final documentation.

## 8. Risk Assessment and Mitigation:

- Challenge: The difficulty in managing XML data.  
Mitigation: Extensive verification and testing of XML writing and parsing techniques.
- Challenge: Compatibility problems with various web browsers.  
Mitigation: During development, test across browsers and fix any compatibility problems.

## Conclusion:

For task management, the Todo List Web Application with XML Data Storage provides an easy-to-use and effective solution. Utilizing XML, servlets, and JSP, the application offers a scalable and maintainable framework that helps users efficiently arrange their jobs. Our goal is to satisfy our target audience by providing a dependable and high-quality online application, which will be achieved through careful planning and risk mitigation techniques.