**TODO Challenge**

**Functional Requirements (Required/Desired)**

|  |  |
| --- | --- |
| Requirement ID | Description |
| 01 – Add Task | User will have the ability to insert a task into the ToDo system by filling out a form and select ‘submit’ |
| 02 – View Task | User will be have the ability to view all tasks in in theToDo system |
| 03 – Delete Task | User will have the ability to type in a task to be deleted and delete the task |

**Non-Functional Requirements**

|  |  |
| --- | --- |
| Requirement ID | Description |
| 01 – Web Browser | The system shall be able to run on type of web browser (ie. Chrome, FireFox ,IE) |
| 02 – Database | The system shall be able to store tasks into a backend database which will track what is inputted into the system |
| 03 – System | The system should be able to run off anytime of server and computer |

**System Architecture Diagram**

Users

Web Server

Presentation Layer

Application Layer

Data Layer

Web Services

Database

Web Server – XAMPP, WAMP

Presentation Layer – HTML, CSS

Application Layer – PHP

Data Layer - MySQL

**Data Flow Diagram**

User

Add Tasks

ToDo Database

tasktable

taskName

taskDate

progress

Data pulled to view tasks

Data to delete

Delete Task

View Task

**Use Cases**

|  |  |
| --- | --- |
| Use Case | Description |
| 01 – Add a Task | A user will navigate to the ToDo web application where they can click on the ‘Add Task’ button from the home page. From there they will be launched to another page displaying for form to fill out to add a task. User will have to fill out the Task Name, Date, and Progress fields. Click ‘Submit’ to submit the form. |
| 02 – Delete a Task | A user will navigate to the ToDo web application where they can click the ‘Delete Task’ button from the home page. From there they will be taken to another page where all of the current tasks in the system are displayed. Fill out a form to delete a task and submit the form. |
| 03 – Run the Web App | A user will launch ToDo through their choice of web browser. Once the web app is running it will display the home page of ToDo which has three buttons on the page allowing the user to add, delete, and view tasks. |

**Sequence Diagram**

**Database Design**

**Class Diagram**

**Test Cases**

|  |  |
| --- | --- |
| Test Case | Description |
| 01 – Add a Duplicate Task | User adds multiple duplicate tasks with the same name, data, and progress type. |
| 02 – Delete the whole tables rows | User can empty out the table by clicking the ‘Clear All’ button. |
| 03 – Add 100 Tasks | User can add 100 tasks and the web app needs to be able to track it consistently. |