

## CROSS-PLATFORM APPLICATION DEVELOPMENT

### PROJECT 1 – CROSS-PLATFORM APP DESIGN AND IMPLEMENTATION

#### SCHOOL VACCINATION TRACKER

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Recently the Government of India has given permission to vaccinate the school going children under age of eighteen with the Covid vaccination. The government is also thinking to manage this effort at the school level as it will be easier to track and manage the vaccination drive progress. Also parents will be assured about the safety of the ward as all the students belonging to a particular school will be vaccinated in the one go providing a safe learning environment for all.

#### OBJECTIVE:

To create working prototype of cross-platform application (involving both frontend and backend components with interactions between them) for the specified user stories using the technologies / frameworks discussed in the classroom sessions

#### PROBLEM STATEMENT:

A web based vaccine tracking system to be specifically designed for administration, tracking and management of vaccination for schools

As a part of this assignment, you are required to implement the User Interface and its related functionalities for the features listed below as user stories.

#### EPIC 1: SCHOOL COORDINATOR LANDING PAGE

##### User Story 1.1:

As a school coordinator, I should be presented with a landing page on successful login.

**Description:** The school coordinator page should contain a dashboard view and a navigation menu to Add/Manage student details, Manage/update Vaccination status, generate reports. The Dashboard to contain the status of analytics (number of students vaccinated, upcoming vaccination drives etc.

##### Acceptance Criteria:

- If there are no vaccination drives, it should display a message “no upcoming drives”.
- The status of number of students registered vs number of them vaccinated to be displayed.

**User Story 1.2:**

As a school coordinator user, I should be able to select the menu items.

**Description:** On clicking the menu item "Add/Manage student details", the user should be navigated to the student details page.

**Acceptance Criteria:**

- A form to accept individual student details to be provided
- Bulk upload of student details option to be provided.

**User Story 1.3:**

As a school coordinator user, I should be able to generate the report of the vaccinations administered with student details.

**Description:** On clicking the "generate report" and selecting appropriate filters the user should be able to view the list of students with vaccination details like vaccinated status, date of vaccination, name of vaccine. Filtering options with name of vaccination to be present

**Acceptance Criteria:**

- The student details with vaccination details like vaccinated status, date of vaccination, name
- of vaccine to be displayed in a table.
- Pagination to be applied.
- Option to download the details in a CSV/ excel/ pdf to be provided.

**Assumptions for EPIC 1**

- User interfaces, client side validation and backend code with APIs need to be implemented.
- It is assumed that the users are successfully created/logged in successfully and directed to landing page.
- The vaccination status details are fetched from the backend and available in JSON format
- Any other assumptions made can be listed in the documentation.

**EPIC 2: MANAGE VACCINATION DRIVE****User Story 2.1:**

As a school coordinator, I should be able to book a vaccination drive

**Description:** The school coordinator should be able to enter the details of the vaccination drive and create it after approval from the relevant authorities

**Acceptance Criteria:**

- A form to enter the details of the vaccination drive [date, number of vaccines available]
- On submit the details to be updated in the upcoming vaccination drives.

**User story 2.2:**

As a school coordinator, I should be able to view the details of the upcoming vaccination drive and modify it

**Description:** The school coordinator should be able to view/edit the details of the vaccination drive

**Acceptance Criteria:**

- The school coordinator should view the details of vaccination drive.
- Option to edit the dates of the drive, number of slots/vaccines to be available.
- The edit option to be disabled for completed vaccination drives

**Assumptions for EPIC 2: [User Stories 2.1, 2.2, 2.3]**

- The vaccination drive and its relevant details are created and available in a JSON format.
- Any other assumptions made can be listed in the documentation

**SUBMISSION REQUIREMENTS**

1. Prepare a document explaining the architecture of the system, tech-stack used and overall flow of the code/ data / request-response flows for the various user stories mentioned.
2. Develop a video demoing all the user stories with proper (audio) explanation.
3. Maintain all the code in the GIT repository and share the access with evaluator [ppawar@wilp.bits-pilani.ac.in](mailto:ppawar@wilp.bits-pilani.ac.in), [bharani.k@wilp.bits-pilani.ac.in](mailto:bharani.k@wilp.bits-pilani.ac.in)

**Notes:**

- This is a take-home assignment to be carried out by each learner group independently.
- You may consult / discuss with other learners peripheral aspects such as the environment but not on solving the specific problems in terms of design or implementation.
- You have to maintain a GIT repository of the code and need to share the access with the evaluator
- You have to write the appropriate documents in order to provide the flow of the code to the evaluators.
- Group together all the final documents, code repo link and Video link needs to be submitted in doc or pdf format only having naming convention like - CPAD\_Project1\_<Group\_ID>.zip
- Provide appropriate justification when arriving at the conclusions.
- In case of any further queries, if those are generic once, learners are encouraged to use discussion forums, otherwise they can reach out to me at [ppawar@wilp.bits-pilani.ac.in](mailto:ppawar@wilp.bits-pilani.ac.in).
- Manage your efforts properly as there is no scope to shift the deadlines announced above.