# Project Design Phase-II
# Data Flow Diagram & User Stories

| Date | 07 November 2022 |
|---|---|
| Team ID | PNT2022TMID52335 |
| Project Name | Containment Zone Alerting Application |
| Maximum Marks | 4 Marks |

**Data Flow Diagrams:**

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

```
                    ┌─────────────────────┐
                    │  Welcome screen and │
                    │   message screen    │
                    └─────────────────────┘
                              │
              ┌───────────────┴───────────────┐
              ▼                               ▼
    ┌──────────────────┐          ┌──────────────────────┐
    │ Statistics data  │          │  Data snapshot from  │
    │ from RESTful API │          │ firebase for new data│
    │                  │          │ OR data snapshot from│
    └──────────────────┘          │        cache         │
              │                   └──────────────────────┘
              │        ┌──────────────────────┐  │
              │        │  Containment zones   │  │
              └───────▶│ shown on a google map│◀─┘
                       │ and Covid-19 statis- │
                       │  tics on a bottom    │
                       │       sheet          │
                       └──────────────────────┘
                              │
                              ▼
                       ┌──────────────────────┐
                       │ Closest 100 contain- │
                       │ ment zones to the    │◀────┐
                       │ user are set with    │     │
                       │     geofences        │     │
                       └──────────────────────┘     │
                              │                      │
                              ▼                      │
                       ┌──────────────────────┐     │
                       │ User receives        │     │
                       │ notification on      │─────┘
                       │ entering a           │
                       │ containment zone     │
                       └──────────────────────┘
```

If the user has travelled to a distant location, geofences need to be updated

**User Stories**

| User Type | Functional Requirement (Epic) | User Story Number | User Story / Task | Acceptance criteria | Priority | Release |
|---|---|---|---|---|---|---|
| Customer | Registration | USN-1 | As a user, I can register for the application by entering my email, password. | I can access my account | High | Sprint-1 |
| | | USN-2 | As a user, I will receive confirmation email once I have registered for the application. | I can receive confirmation email | High | Sprint-1 |
| | Login | USN-3 | As a user, I can log into the application by entering email & password. | I can access my account with Login | High | Sprint-2 |
| | | USN-4 | As a user, I can give forgot password and verify through my email. | I can login even when password is unknown | Medium | Sprint-2 |
| | Input | USN-5 | As a user, I can give my present location. | I can enter my location. | High | Sprint-3 |
| | | USN-6 | As a user, I can update my location in google map. | I can set my location. | High | Sprint-3 |
| | | USN-7 | As a user, I can enter my loction. | I can input location. | Low | Sprint-5 |
| | Dashboard | USN-8 | As a user, once I logged in Graphical representation of my location is achieved. | I can view my updated dashboard | Medium | Sprint-4 |
| | | USN-9 | As a user, I can track my location daily, monthly. | I can track my location. | High | Sprint-4 |
| | | USN-10 | As a user, I can revisit my location on a specific day. | I can revisit my location. | Low | Sprint-5 |
| | Notifications | USN-11 | As a user, I can receive alert messages from containment zones. | I can be notified. | High | Sprint-3 |
| | | USN-12 | As a user, I can receive suggestion notifications. | I can be notified. | Medium | Sprint-4 |
| Customer Care Executive | Customer Care | USN-13 | As an executive, I can solve the queries and issues regarding the application | I can give 24/7 support.. | Low | Sprint-5 |
| Administrator | Application | USN-14 | As an administrator, I can upgrade or update the application. | I can fix the bugs and improve the application. | High | Sprint-5 |