DeeClutter

MIND BODY SOUL

Submitted by :

Abhay Bedi (102016081)

Ananya Singh (102016083)

Ishaan Bansal (102196011)

<u>DeeClutter</u>

UCS503
Software Engineering Project Report
End-Semester Evaluation

Submitted by:
Abhay Bedi (102016081)
Ananya Singh(102016083)
Ishaan Bansal ()

B.Tech Second Year, CSE
GROUP NO: 01

Dr. Ashish
Computer Science and Engineering
Department TIET, Patiala
May 2022

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Software bid

Software Bid/ Project Teams

UCS 503- Software Engineering Lab

Group : _cs11___   Dated: 20-4-2022

Team Name: Group 1
Team ID (will be assigned by Instructor): 01

Please enter the names of your Preferred Team Members.

• You are required to form **a three to four person** teams
• Choose your team members wisely. You will not be allowed to change teams.

Name	Roll No	Project Experience	Programming Language used
Abhay Bedi	102016081	FOOD ORDERING APP	JAVA
Ananya Singh	102016083	FOOD ORDERING APP	JAVA
Ishaan bansal	102196011	ELC PROJECT	C++

Programming Language / Environment Experience

List the languages you are most comfortable developing in, **as a team**, in your order of preference. Many of the projects involve Java or C/C++ programming.
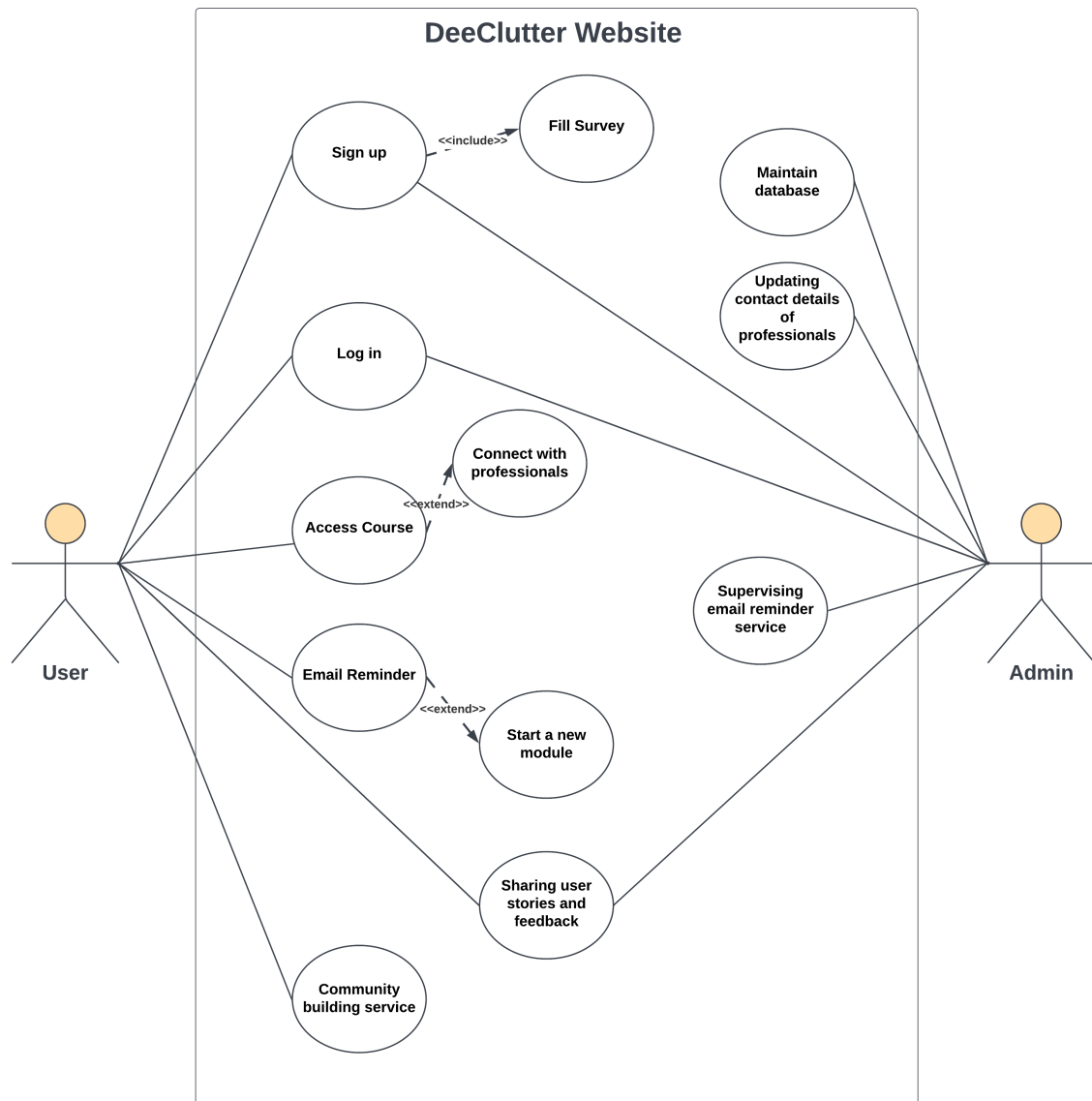
1. HTML
2. CSS
3. JAVASCRIPT

Choices of Projects:

Please select **4 projects** your team would like to work on, by order of preference: *[Write at-least one paragraph for each choice (motivation, reason for choice, feasibility analysis, etc.)]*

First Choice	DEECLUTTER- digital detox and self care website
Second Choice	DICE ROLL GAME - based on basic c++
Third Choice	Housing design website- HTML & CSS WEBSITE
Fourth Choice	

ANALYSIS PHASE

2.1 Use Case Diagram

DeeClutter Website

Sign up
Fill Survey
<<include>>
Maintain database
Updating contact details of professionals
Log in
Connect with professionals
Access Course
<<extend>>
Email Reminder
Supervising email reminder service
Start a new module
<<extend>>
Sharing user stories and feedback
Community building service

User

Admin

Use Case Template

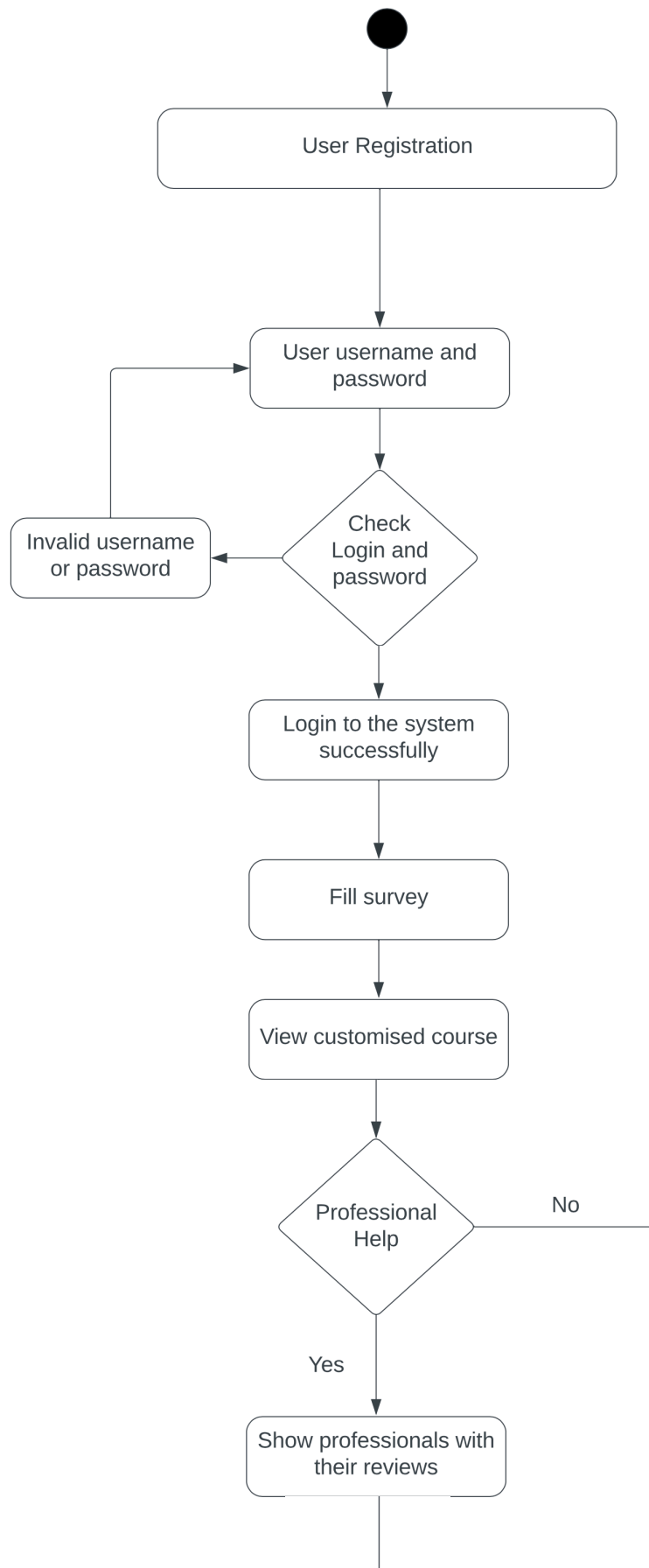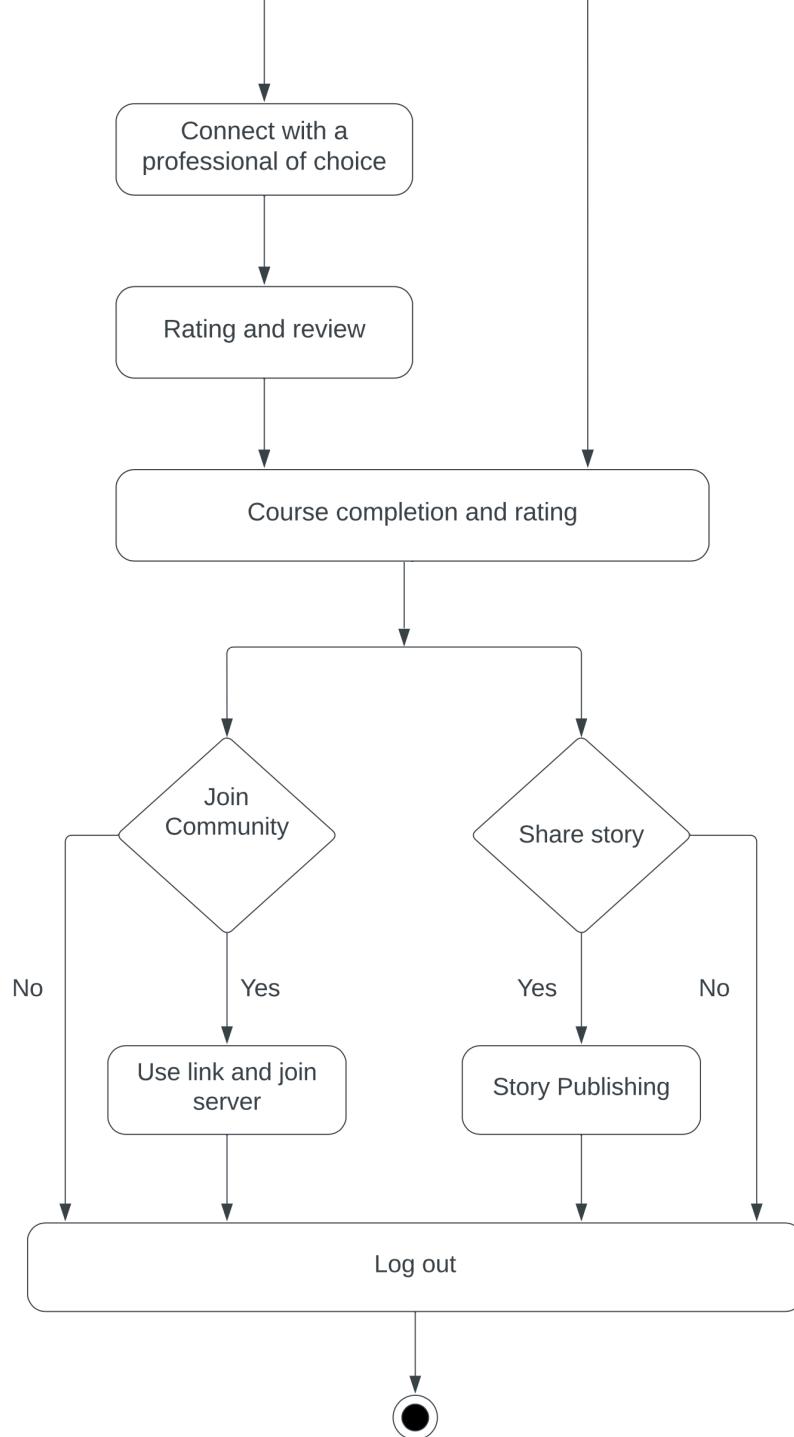| Use case title	Deeclutter :Web application
Use case id	1
Actor	User/Customer
Description	The user can log into the website and access the course to avail the detox course being provided.
Precondition	The user should have access to the internet The user should be a member (or sign up if he/she is a new member)
Description	1. User logs in 2. User goes to his/her profile 3. User chooses from List of modules available 4. User avails the module 5. Arranges meetings, if needed 6. Uses Community feature and join a server
Post conditions	1. User can see his/her Course material 2. User can join links to communities 3. User can schedule meetings (online/offline)
Modification history	Date : 2nd may 2022
Author	Ananya singh

Use Case Scenario

Main Case Scenario:
1. User logs into their account using their assigned username and password.
2. System validates the username and password, granting access if correct.
3. User views their profile and chooses the module they want to learn.
4. Module is displayed.
5. User accesses the material provided by the module and continues with the course.
6. User logs out

Extensions:
2.a:The password or username is not correct, then access is not provided to account.
5.a: User schedules appointment with the professional of choice through the list of professionals given.
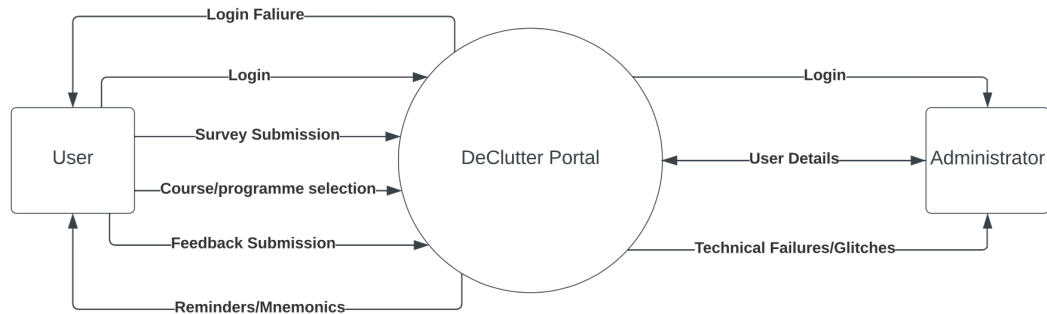5.b: Server links are used and customer joins a community on any platform of choice.

2.2 ACTIVITY DIAGRAM

```
                              ●
                              │
                              ▼
                    ┌───────────────────┐
                    │ User Registration │
                    └───────────────────┘
                              │
                              ▼
                    ┌───────────────────┐
          ┌────────▶│ User username and │
          │         │     password      │
          │         └───────────────────┘
          │                   │
          │                   ▼
          │                  ◇
  ┌───────────────┐    Check Login and
  │Invalid username│◀── password
  │ or password   │        ◇
  └───────────────┘         │
                            ▼
                  ┌───────────────────┐
                  │ Login to the system│
                  │    successfully   │
                  └───────────────────┘
                            │
                            ▼
                  ┌───────────────────┐
                  │    Fill survey    │
                  └───────────────────┘
                            │
                            ▼
                  ┌───────────────────┐
                  │View customised course│
                  └───────────────────┘
                            │
                            ▼
                           ◇
                    Professional          No
                      Help    ◇──────────────┐
                           ◇                  │
                           │                  │
                          Yes                 │
                           ▼                  │
                  ┌───────────────────┐       │
                  │Show professionals with│    │
                  │   their reviews   │       │
                  └───────────────────┘
```
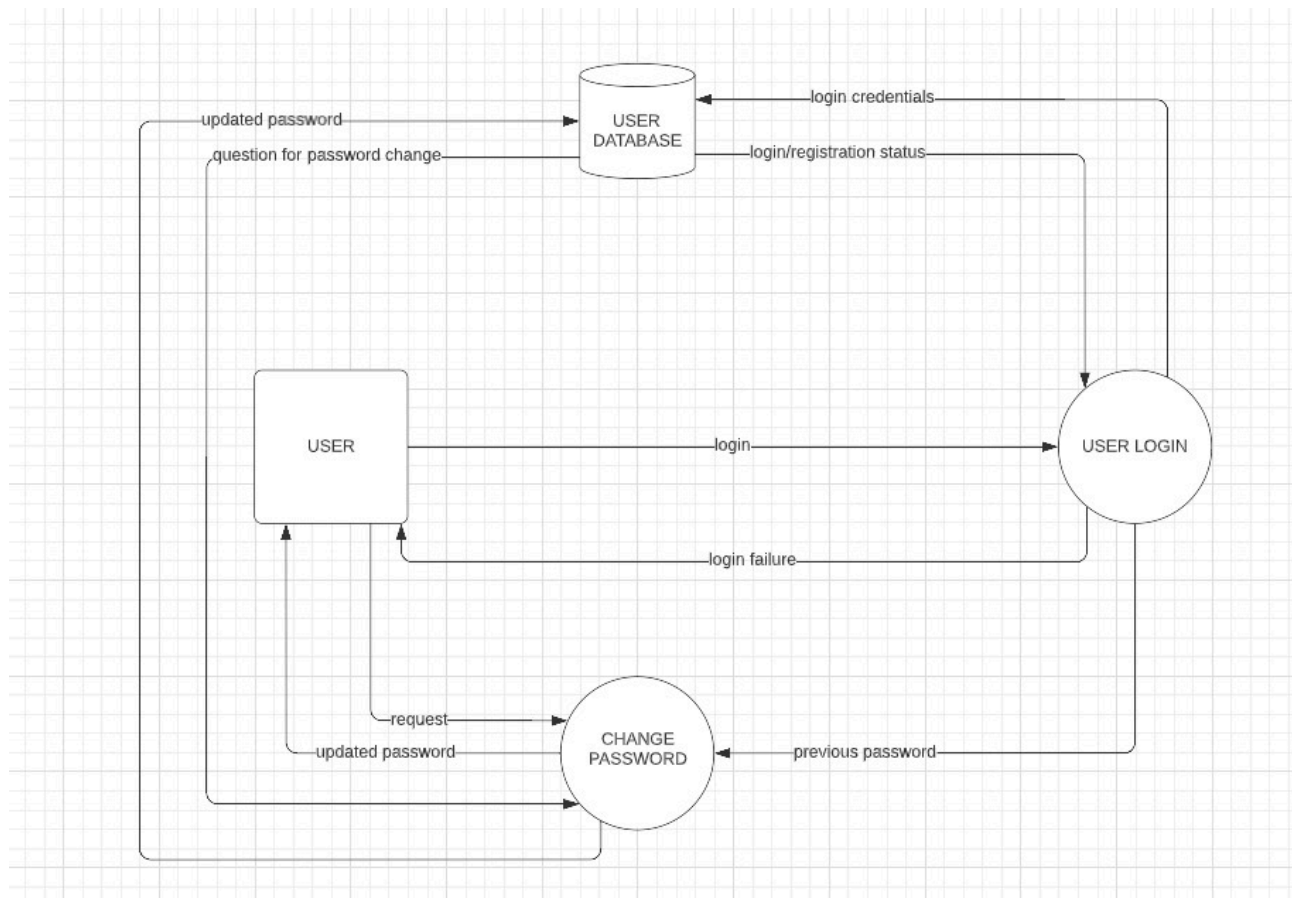
```
                                    ┌──────────────────────┐
                                    │   Connect with a     │
                                    │ professional of choice│
                                    └──────────────────────┘
                                              │
                                              ▼
                                    ┌──────────────────────┐
                                    │  Rating and review   │
                                    └──────────────────────┘
                                              │
                                              ▼
                          ┌────────────────────────────────────┐
                          │   Course completion and rating     │
                          └────────────────────────────────────┘
                                              │
                                              ▼
              ◇ Join                                    ◇ Share story
              Community                                 
        No ───┘      │ Yes                    Yes │            └─── No
                     ▼                            ▼
              ┌──────────────┐              ┌──────────────┐
              │ Use link and │              │    Story     │
              │ join server  │              │  Publishing  │
              └──────────────┘              └──────────────┘
                     │                            │
                     ▼                            ▼
        ┌─────────────────────────────────────────────────────┐
        │                      Log out                        │
        └─────────────────────────────────────────────────────┘
                                   │
                                   ▼
                                  ●
```

2.3 DFDs

2.3.1 DFD Level 0

2.3.1 DFD Level 1
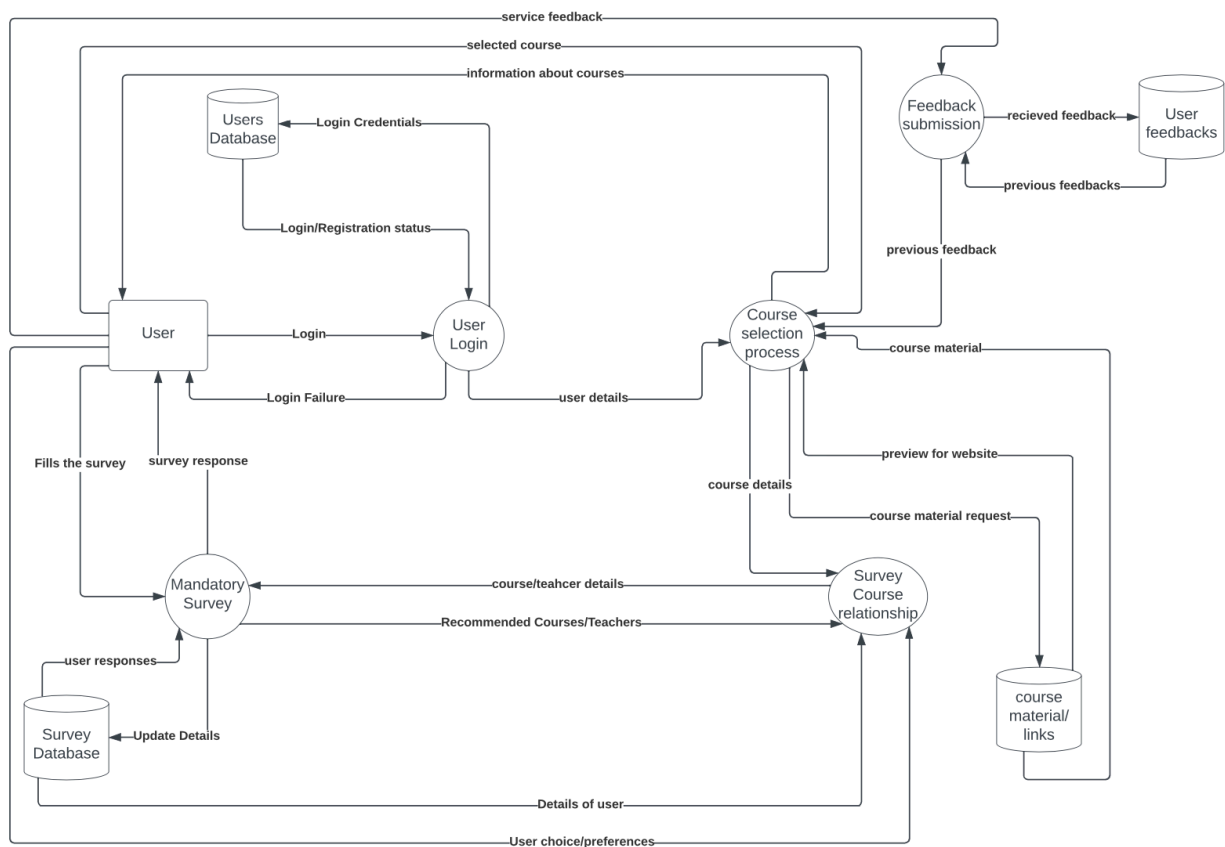
2.3.1 DFD Level 2

• User Login

• Mandatory Survey
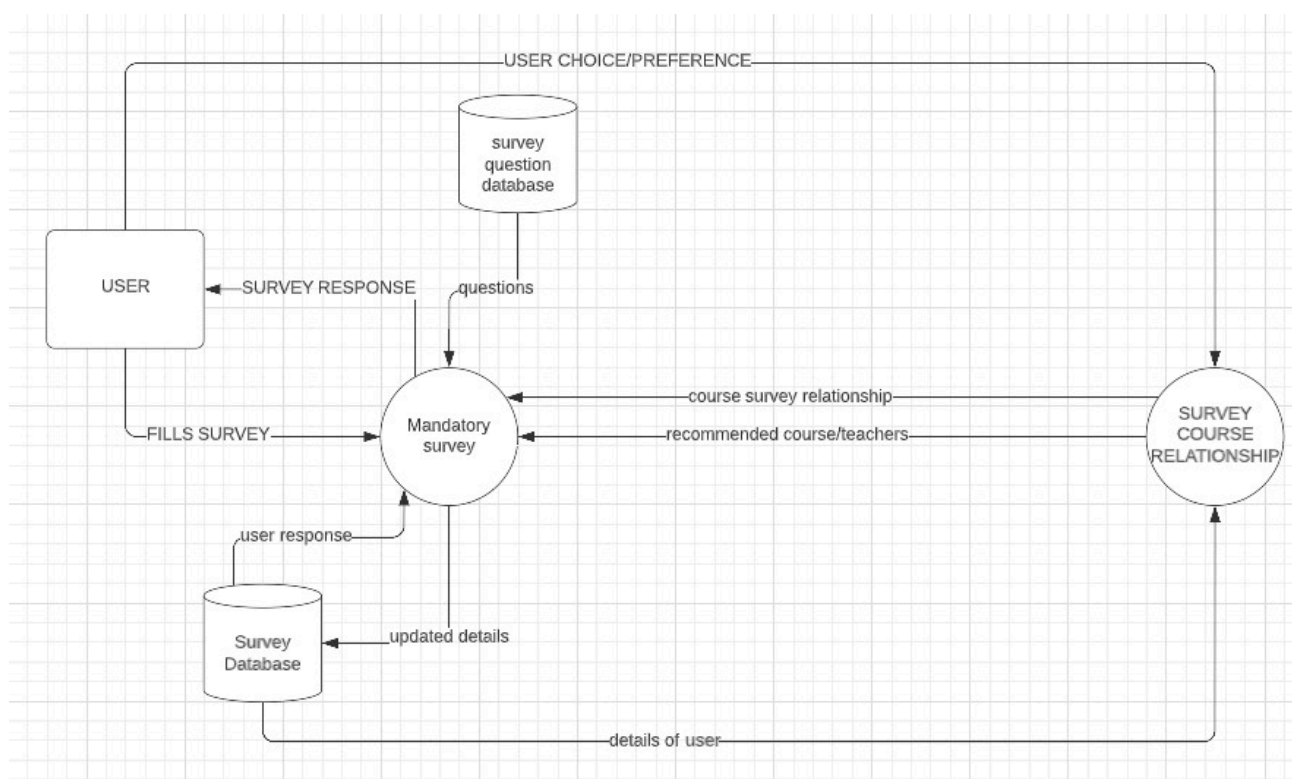
IEEE Format SRS

TABLE OF CONTENTS

1.Introduction

1.1 Purpose

The purpose of this SRS document is to provide a detailed overview of our software product, parameters and goals. This document describes the project's target audience and its user interface, hardware and software requirements.

1.2 Scope of the Project

Declutter is a web based application specifically targeting the audience which seeks a social media detox. It focuses on a versatile course designed to not only provide the user with a social media cleanse but to also deliver resources supporting and building the user's wellness and mental health aspects.

The software must be able to perform the following operations:

1. It must be able to authenticate the user by matching the username and password against the values stored in the database: A login portal will be designed where the user needs to enter his/ her username and password before he/ she can access the functionality of the software.

2. It must be able to successfully use the data received by the mandatory survey to assign the right modules to the user.

3. It must able to help the user find professionals that users can schedule sessions with, if required.

4. It must also provide the links to servers/communities that the user would wish to join, in order to connect with like minded people.

6. The software must be able to respect the privacy of the users (phone numbers shouldn't be made accessible by the software, it should be users call to share or not).

7. The user must be able to access his module and use the privileges allotted to him freely.

1.2 Document Conventions

Typeface	Indicates
Font	Helvetica Neue
Bold	Mainly for headings
Italics	Mainly URLs in References
Blue-Underline	Used for URLS

1.3 Target Audience

The application targets all those suffering from social media addiction.

It comprises of Instagram, Snapchat, TikTok, Reddit or Facebook users majorly.

Those feeling that there's a rise in their smartphone usage or those seeking a break from super busy work schedule. It also targets those who feel that they might be suffering with

the various ill- affects of consuming content online. A few of these issues that we target include:

• Inadequacy about your life or appearance.
• Fear of missing out (FOMO).
• Depression and anxiety
• Cyber-bullying
• Self-absorption

1.4 Project Overview

a. DeeClutter is a web-based application that aims to help the user in achieving a detox or break from social media and the constant online content consumed.
b. It focuses on providing the user with a checkpoint based course, customised according to the user current mental state.
 c. Frequent progress checks have also been planned as a part of the course, informing the client as well as the service provider's database.
d. Its intention is to ensure that the user feels 'healed' or 'recovered'.

1.5 References

• https://www.psycom.net/anxiety-test
• https://www.verywellmind.com/why-and-how-to-do-a-digital-detox-4771321#:~:text=A%20digital%20detox%20refers

[%20to,life%20social%20interactions%20without%20distractions.](#)
- https://www.goodhousekeeping.com/life/g30681374/social-media-detox-tips/
- https://wanderingaimfully.com/social-media-detox-recap/
- https://www.headspace.com
-
- https://www.lucidchart.com/pages/
- https://www.lucidchart.com/pages/examples/data-flow-diagram-software
- https://www.lucidchart.com/pages/uml-class-diagram
- https://www.vecteezy.com/

2. Overall Description

2.1 Product Perspective

- The product will run a web application. It's an application designed for general public welfare, to assist them in overcoming issues often caused by the constant consumption of social media (like Instagram, TikTok, Facebook)

- The user just needs to login with their general information like email. They have to set a username and password which will allow them access to the site.

- Next, the user attempts a survey that will evaluate which modules of the course will be beneficial for the individual.

- Further, help will be provided in contacting to people who would understand their problems and thus lead to community building. Server links to different platforms will help people connect to each other and find support.

- A list of professionals/wellness mentors/counsellors will also be displayed so that the user can even schedule appointments (both online/in-person) if needed. This list may include both paid and free sessions to be provided.

2.2 Product Functions

The product should be able to perform the following operations:
- It must be able to authenticate the user by matching the username and password against the values stored in the database.
- A login portal will be designed where the user needs to enter his/ her username and password before he/she can access the functionality of the software.
- The application begins with a customised survey to obtain the present level of 'indulgence' of the user in. This mandatory survey will help in deciding what the current mindset the user is in.
- Based on the report obtained, an analysis is done. It judges the current degree of requirement of the user. It presents with the accurate stage of the multi stage course/therapy for the current user and provides estimated time for the entire course to complete.
- For instance,
- The website further will provide the user with resources and links to various other platforms that help in community building and are a prominent part of assisting people.
- There will also be details of various professionals that can be contacted in order to schedule sessions (in-person/online) if needed.

- After the completion of the course, the user is asked if he/she is interested in sharing feedback or "success stories" which are featured to inspire more people

2.3 Operating Environment

The website will need to work on Chrome version 100.0.4896.127 (Windows/Linux/MacOS) as well as Chrome version 100.0.4896.127 (Android/IOS), Firefox version 91.0, (Windows/ Linux/MacOS/Mobile) and Microsoft Edge version 88.0. 705.50

2.4 General Constraints, Assumptions and Dependencies

- Software has to be user-friendly. A user using Deeclutter website must have a brief idea about how to navigate through the website, further taking full benefit of the website along with a little bit knowledge about computers is required.

- Since we are storing a lot of information, we do need memory requirements, which should be dynamic.

- Our database server and backup servers should be regularly updated, due to the new user entries. Additional latencies may arise due to multiple updates/deletions/creations of records which need to be taken care of.
- It is assumed that the site will be open-source and will be available to use to anyone and everyone that wishes to use it for its intended purpose.

3.System Features: Functional Requirements
3.1 Create Profile
3.1.1 Description

Users can easily create a profile so that they are able to access the website and create as well as maintain their profile. It is a high priority task as it allows the users to access to their profile and allows management of the same.

_____

3.1.2 Input

The details of the user like name, username, mobile number, location, email etc.will be entered.

_____

3.1.3 Stimulus/Response Sequences

When the user creates a new profile, the database is updates and the new user's credentials are stored in the mentioned database. These credentials are then used to login to the website the next time the users access the website.

If the user already has registered, then their information is stored in the database already and then can directly access their profile.

_____

3.2 Filling mandatory survey

3.2.1 Description and Priority

After the login is a mandatory survey that examines the current level of indulgence of user in social media or related activities.

_____

3.2.2 Input

The survey asks multiple questions based on time spent, genre of content consumed and the type of service that they wish to have. Answers entered will act as input.

_____

3.2.3 Stimulus/Response Sequences

The response of the survey will be stored in a database. Depending on the response, different areas/modules of the course will be unlocked.

_____

3.3 Availing different course facilities provided

3.3.1 Description and Priority

Users are given access to various modules depending on the results of their form. They can complete the available levels and tasks specifically designed to target their issue.

Here is a brief list of such modules:

a. Anxiety

b. Sleep problems and fixing sleep cycle

c. Reducing screen time

d. Focusing on healthier morning routines

e. Meditation

_____

3.3.2 Input

An individual's choice of the module that they wish to start will be noted. Whatever module clicked on, is selected.

3.3.3 Stimulus/Response Sequences

Once a certain course is selected, the contents are displayed on the website screen so that the user can analyse the content present in a particular module. Further the user can choose what module they wish to start and can engage with it.

_____

3.4 Connecting with professionals/ counsellors

3.4.1 Description and Priority

A list is provided including counsellors and professionals specialising with assisting people dealing with the issue a particular module is targeting.
Along with that the user can sign up other classes and meetings that are being organised by wellness gurus, counsellors, professionals etc.

Along with this, links and tertiary information will also be provided.

_____

3.4.2 Input

The profile of a counsellor with tertiary details will be selected.

_____

3.4.3 Stimulus/Response Sequences

- Once a particular counsellor's contact is chosen, their details are displayed, which gives the user the choice of either scheduling a meeting or skipping the counsellor on their own. We provide the user with tertiary information that they can act on. The cost of each meeting is also listed, if any. Hence, a connection is established between both the parties.

_____

3.5 Sharing Success Stories and past experiences
3.5.1 Description and Priority

Users will have the feature to share their past experiences and success stories. They can submit their entries along with a profile picture and personal details that they wish to share with the public on the platform.

_____

3.5.2 Input
Entry submitted by the user will act as input.

_____

3.5.3 Stimulus/Response Sequences

The response will be sent to the admin through the email provided, who then will approve the story and the upload the same on the website.

_____

3.6 Provide community building features

3.6.1 Description and Priority

There will exist an option for the users to connect with people dealing with the same issues/ problems. This aims to assist the individuals in their detox as well as motivate others to focus on their well being, serving as a healthy community for everyone to gain insight from.

_____

3.6.2 Input

The links for joining groups/communities/servers will be clicked.

_____

3.6.2 Stimulus/Response Sequences

The link redirects to the platform where a server exists, including people who have previously joined.
Thus people can find more like minded individuals and support.

_____

3.7 Sending routine progress mails

3.7.1 Description and Priority

The user even after successfully completing the course will get routine mails checks to ensure that they are on the right track and do not desire to engage with the course again. On the contrary, if there is a need for the user to participate/engage with the course again, they can do so through the main

_____

3.7.2 Stimulus/Response Sequences

Case I The user does not wish to take the course again or even access their account for any assistance: nothing will be the done. The routine mail will be sent the next time and the follow ups will be done.
Case II The user feels the need to look into a module, visited and unvisited alike. If the user wishes to access a visited module they can easily do so by logging in and accessing the module from their account. Apart from this, the user can retake the survey and start a different journey.

_____

4. External Interface Requirements

4.1 User Interfaces

• User interface (UI) design is the process designers use to build interfaces in software or computerised devices, focusing on looks or style. Designers aim to create interfaces which users find easy to use and pleasurable.

• The goal of user interface design is to produce a user interface which makes it easy, and efficient to operate the software/ machine.

• The interface avoids ambiguity by making everything clear through language, flow, hierarchy and metaphors for visual elements

• the interface should provide good feedback to the user about what's happening and whether the user's input is being successfully processed

• Time is money, and a great interface should make the user more productive through shortcuts and good design.

• The UX of the website is the input method for data: keyboard and mouse and interfaces: front end.

4.2 Hardware Interfaces

• Hardware interfaces exist in many of the components, such as the various buses, storage devices, other I/O devices, etc.

• A hardware interface is described by the mechanical, electrical and logical signals at the interface.

• The hardware interface of the website is the same as that of a generic PC or smartphone.

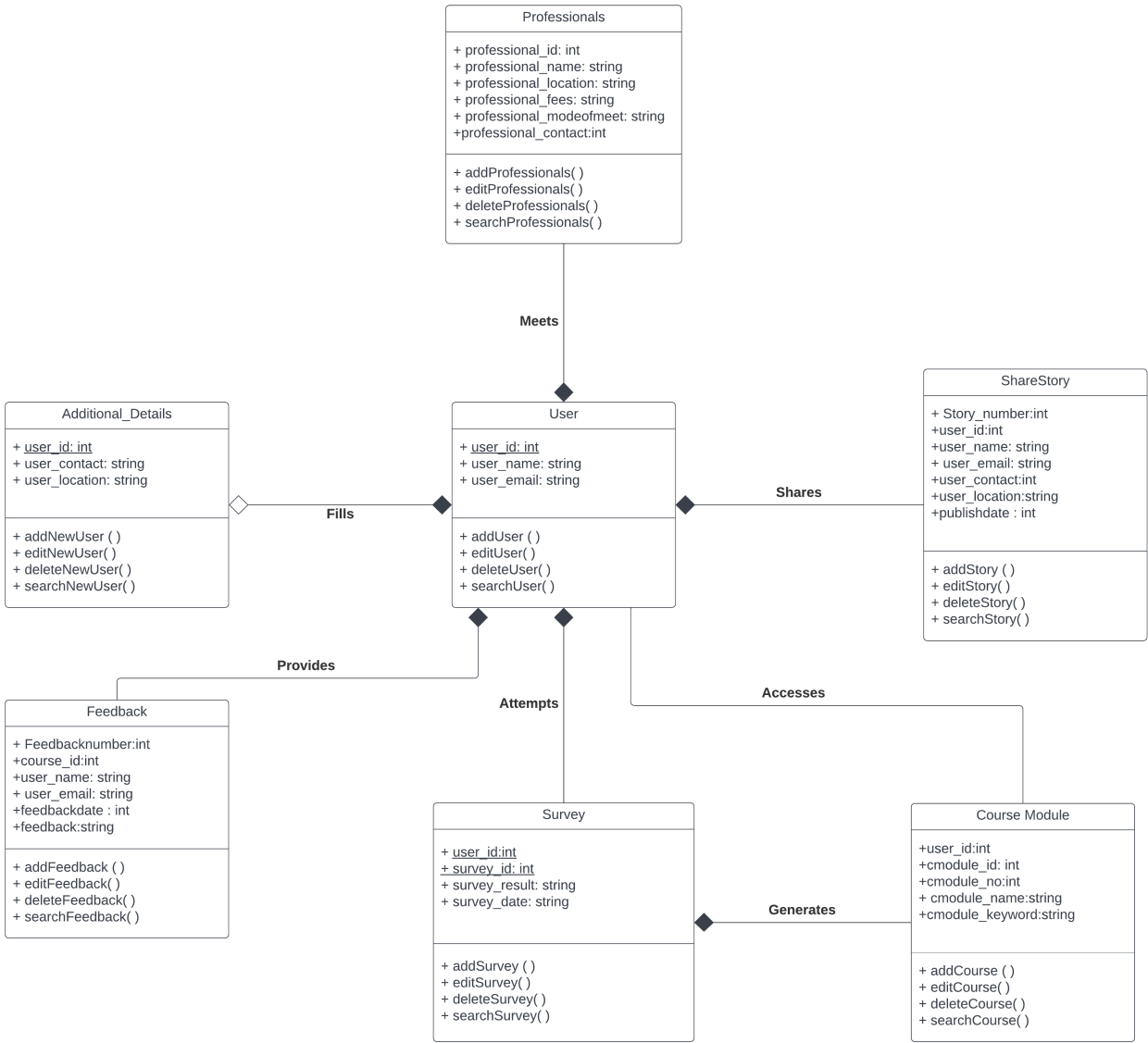# 5. Other Nonfunctional Requirements
5.1 Performance Requirements
- The site has to load in less than 3 seconds.
- It should be responsive, and should be able to handle at least 500 concurrent users at once, with a load time of 3 seconds or less

5.2 Security Requirements
• Users should not be able to look at other user's credentials
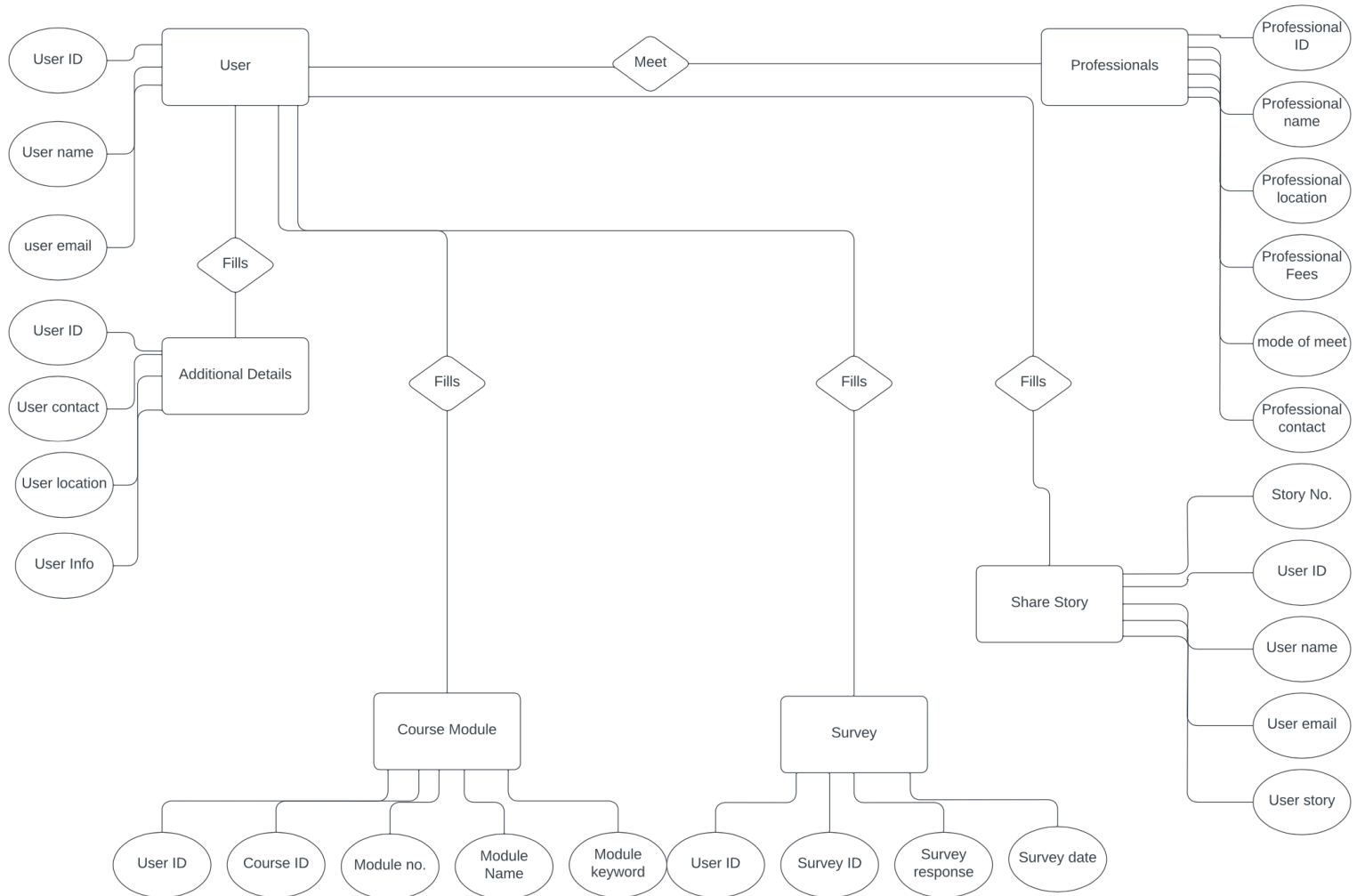• Contact information of the professionals and users should be safe.

DESIGN PHASE

3.1 Class Diagram

Professionals

+ professional_id: int
+ professional_name: string
+ professional_location: string
+ professional_fees: string
+ professional_modeofmeet: string
+professional_contact:int

+ addProfessionals( )
+ editProfessionals( )
+ deleteProfessionals( )
+ searchProfessionals( )

Meets

Additional_Details

+ <u>user_id: int</u>
+ user_contact: string
+ user_location: string

+ addNewUser ( )
+ editNewUser( )
+ deleteNewUser( )
+ searchNewUser( )

Fills

User

+ <u>user_id: int</u>
+ user_name: string
+ user_email: string

+ addUser ( )
+ editUser( )
+ deleteUser( )
+ searchUser( )

Shares

ShareStory

+ Story_number:int
+user_id:int
+user_name: string
+ user_email: string
+user_contact:int
+user_location:string
+publishdate : int

+ addStory ( )
+ editStory( )
+ deleteStory( )
+ searchStory( )

Provides

Attempts

Accesses

Feedback

+ Feedbacknumber:int
+course_id:int
+user_name: string
+ user_email: string
+feedbackdate : int
+feedback:string

+ addFeedback ( )
+ editFeedback( )
+ deleteFeedback( )
+ searchFeedback( )

Survey

+ <u>user_id:int</u>
+ <u>survey_id: int</u>
+ survey_result: string
+ survey_date: string

+ addSurvey ( )
+ editSurvey( )
+ deleteSurvey( )
+ searchSurvey( )

Generates

Course Module

+user_id:int
+cmodule_id: int
+cmodule_no:int
+ cmodule_name:string
+cmodule_keyword:string

+ addCourse ( )
+ editCourse( )
+ deleteCourse( )
+ searchCourse( )

3.2 Database design : ER
3.2.1 ER diagram

3.2.2 Data Dictionaries

Collection: Professional

Field name	Data type	Description	Example
professional_id	Integer	Gives the id number of the professional	Id: 6099
professional_name	String	Stores the professional name	Priya anand
professional_location	String	Stores the professional's clinic location	New Delhi
professional_fees	String	Charges if any	Rs. 0
professional_modeof meet	String	Stores the type of meets available: online/ inperson	Inperson,online
professional_contact	Integer	Consists of contact info	913423785905

Collection: User

Field name	Data type	Description	Example
user_id:	Int	Gives user id	Id:1233
user_name	String	Stores username of choice filled by user	Reva_sharma21
user_email	String	Contains user's email	reva_s@gmail.com

Collection: Survey

Field name	Data type	Description	Example
user_id	Int	Foreign key from user table to identify link user to their respective survey	Userid:1237
survey_id	Int	Stores survey number	Id:1695
survey_result	String	Stores keywords representing the modules that need to be unlocked	Anxiety,sleep
survey_date	String	Shows the date the survey was filled	12-04-2022 (dd/ mm/yyyy)

Collection: Course

Field name	Data type	Description	Example
user_id	Int	Foreign key linking the user with the course taken	Userid: 1237
cmodule_no	Int	Uniquely identify course no	10
cmodule_id	Int	Stores the id of the course	4300
cmodule_name	String	Contains the course name	Anxiety
cmodule_keyword	String	Covers the topic the module is made for	Tense, restless

Collection: ShareStory

Field name	Data type	Description	Example
Story_number	Int	Consists the story_number	21
user_id	Int	Foreign key to link user to the story they wish to publish	1237
user_name	String	Records the user's name	Reva Sharma
user_email	String	Foreign key that Stores email	reva_s@gmail.com
user_location	String	Shows user's home location	New Delhi
user_contact	Int	Has user's phone no.	912348764911
Publishdate	Date	Stores publish date	22/02/2021

Collection: Additional Details

Field name	Data type	Description	Example
user_id	Int	Foreign key that links id to the additional details	1237
user_contact:	String	Keeps User contact id	9147589643264
user_location	String	Stores the location of the user	New Delhi

Collection: Feedback

Field name	Data type	Description	Example
Feedbacknumber	Int	Stores the feedback number	1234
course_id	Int	Consists of course id	1432
user_name	String	Foreign key Username to link feedback to its user	Reva Sharma
user_email	String	Stores email linked to each feedback	reva_s@gmail.com
Feedbackdate	Int	Maintains the date of when the feedback was given	23.01.2020
Feedback	String	Includes keywords like good, avg etc	Good