SOFTWARE REQUIREMENTS SPECIFICATION

for

ALLERGY TRACKING APP

Version 1.0

Prepared by : Anna Chechenina

Yvette Dimitrova

Stefano Galiano

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1 Introduction

1.1 Purpose

The "Breath easy" is an Android and IOS app that will help people with allergies to keep track of allergens in the nearby area. The app will contain a map where users will see alerts from other people and will be aware of specific allergens.

This will be especially relevant for people with severe allergies to prepare for the possible allergens before symptoms will hit them.

1.2 Intended Audience and Reading Suggestions

"Breath easy" is for people with allergies, mainly with air allergies such as pollen, dust, ticks, mites, and chemicals.

1.3 Project Scope

"Breath easy" will function as a network of people with similar allergies.

• Sign-in/sign-up options. The users will be able to sign up using different social networks and log in later to the created account. Once the user is registered, we will pro

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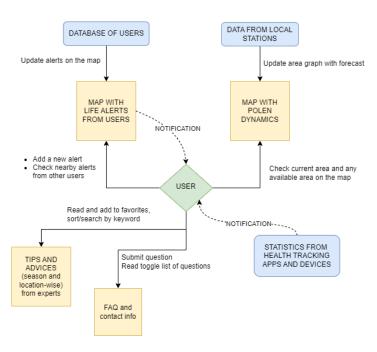


Figure 1.1: Diagram of functioning and sections available for users

2 Overall Description

2.1 Product Perspective

"IICT WEBSITE" is the replacement of the manual hard copy result process. The data have been stored in the hard file or papers, this website will store all of those in the website. Main goal of this project is to minimize the work and maximize the result of this result processing system.

2.2 User Classes and Characteristics

"IICT WEBSITE" has basically 4 types of users.

- Teachers
 - Director
 - Course Teacher
- Students
- Official Staff

Teacher has 2 types - Director defines the course teachers who will take the courses. Student fulfill all the requirements like- fees, informations can take advantages of the website.

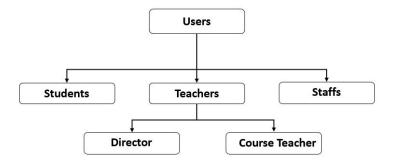


Figure 2.1: type of users

2.3 Product Functions

"IICT WEBSITE" store all the results of the students of program PGD, MIT. Also others programs can be included if necessary. Before using the main function of the

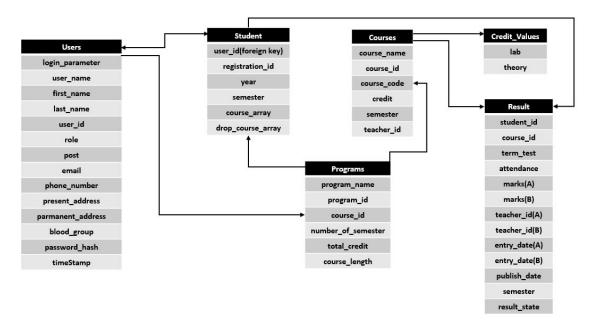


Figure 2.2: Data Flow Diagram

software result process, users have to be registered.

All users have - login_parameter, user_name, first_name, last_name, user_id, role, post, email, phone_number, present_address, parmanent_address, blood_group, password_hash and timeStamp.

Students have some extra informations after complete his/her registration , such as user_id(foreign key), registration_id, year, semester, course_array and drop_course_array. These are the information that contains his/her result of his taken courses and program. Each programs has some data - program_name, program_id, course_id, nunmber_of_semester, total_credit and course_length. There will be onew or many course_id in each programs.

Courses table contains - course_name, course_id, course_code, credit, semester and teacher_id.

Every course has its own Credit Values. Those have been 2 types - lab, theory. Result is the main feature of all. It contains the values of all the exams of a particular student. It has data field - student_id, course_id, term_test, attendance, marks(A), marks(B), teacher_id(A), teacher_id(B), entry_date(A), entry_date(B), publish_date, semester and result_state.

2.4 Operating Environment

The website will be operate in any Operating Environment - Mac, Windows, Linux etc.

2.5 Design

Student activities have 3 steps -

- From Fill Up Process
- Courses Payment
- Student Profile

Top selected Student first fill his/her form, bank payment. After verification, student pays for their selected courses. Then he can enter his profile.

Every student profile contains his/her personal information, results, taken courses, dropped courses and notice.

Notice will contain all the news of IICT.

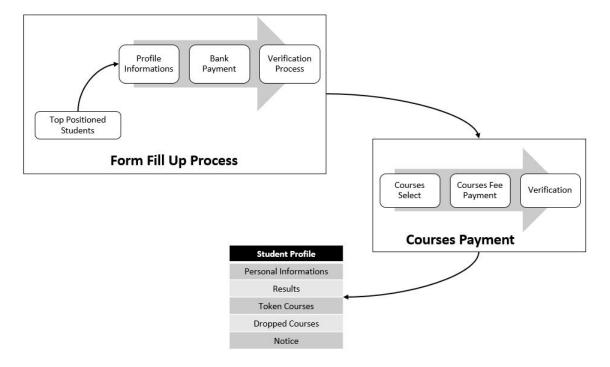


Figure 2.3: Student Activities

Teacher activities have 2 steps -

- Director
- Course Teacher

Director can re-view the result, publish result, give notice and also create teacher. He can also perform course teacher activities.

Teacher creates results, view students and create notice.

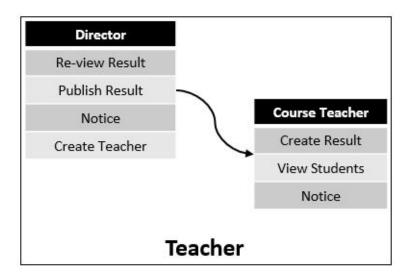


Figure 2.4: Teacher Activities

Staff has only one activity -

• Notice



Figure 2.5: Staff Activities

3 System Features

"IICT WEBSITE" is a result processing web software. So the main art of this product is to enter data of results and publish.

3.1 Description and Priority

"IICT WEBSITE" has features that are main and also some are sub. But all the feature is necessary for this software.

The features with priority up to down -

- 1. Result Creation: This is the goal feature of this software. It is been operated by teachers. They input the results of the students.
- 2. Result Re-view: This is done by director.
- 3. Result Publish: It is basically notice. This is mainly done by director or sometimes by staffs commanded by director.
- 4. Teacher: Teacher takes the courses and create the results.
- 5. Student: Student takes the courses of a program.
- 6. Staff: Their only work is to post notice.

3.2 Functional Requirements

The "IICT WEBSITE" website is being build on .NET framework, C# language, React, React Redux, JavaScript and MongoDB.

Back-End - .NET framework, C# language.

Font-End - React, React Redux, JavaScript.

Database - MongoDB.

4 Other Nonfunctional Requirements

4.1 Performance Requirements

"IICT WEBSITE" will be used for result system of IICT programs, like - PGD, MIT. So for more interaction .NET, React and MongoDB is used.

4.2 Security Requirements

No one without registered users can inter to the website. One particular user of a section only can perform his/her particular actions.

4.3 Software Quality Attributes

In the development phase also testing and conferences of users is been continued. So that the quality of the software is been maintained and all the requirements are been fulfilled.

Database, logical and also UI test is required.

4.4 Business Rules

"IICT WEBSITE" is for storing students results and publish those results of particular programs.

Basically save working time and pressure.

5 Other Requirements

"IICT WEBSITE" needs maintenance as it is a long process software. It will need refactoring and further the requirements can be changed as the field is changing frequently.