**Software Requirement Specification of**

**A Student Life Management System**

**1. Introduction**

**1.1 Purpose**

The purpose of the Student Life Management System is to make all the academic processes of an Institution easy.We all know that all the academic processes is very hard to manage through paper files and also very time consuming and costly.The Student Life Management System will ensure the smooth compleition of all these processes.

**1.2 Scope**

We have also dicussed about the future scope of this Student Life Management Sytem.In future,We might make the app version of this system and launch it on play store.We may also add some other features such as set daily and weekly study goals, an E-library,personilized lecture video recommendations.

**1.3 References**

1. Jain, S., Bhosle, V., Garg, R., & Sah, L. (2017). **Smart University-Student Information Management System.** In Proceedings of the 2017 International Conference on Smart Technology for Smart Nation (pp. 1183–1188). IEEE.
2. Bharamagoudar, S. R., Geeta, R. B., & Totad, S. G. (2013). **Web Based Student Information Management System.** International Journal of Advanced Research in Computer and Communication Engineering, 2(6), 2342–2348.
3. Rexha, B., Lajqi, H., & Limani, M. (2010). **Implementing data security in student lifecycle management system at the University of Prishtina.** WSEAS Transactions on Information Science and Applications, 7(7), 965–974.

**2. General Description**

**2.1 Product Perspective**

The Student Life Managements System is a Web Application which will be the main student portal of an institution.It may integrate with the available college database of the students via API.

**2.2 Product Functions**

In this Student Life Management There will be three type of User Interfereces one for students,one for teachers, and another one for College Administrators.

There will be SignUp,LogIn,LogOut features for all three type of users.

**Students:**

* Students can view their attendance and its history
* Students can submit assignments
* Students can ask queries/doubts
* Students can view exam/class timetable
* Students can get notifications about important announcements from college

**Teachers:**

* Teachers can give Assignments to Students
* Teachers can give the attendance of the students
* Teachers can also give internal marks(only accessable by teachers)
* Teachers also can get notifications

**Admin:**

* Admin can send notifications to both teachers and students separately
* Admin can access all the details of teachers and students and update them if necessary

**2.3 User Characteristics**

In this system students and teachers are expected to have basic computer and tech knowledge to use this Webapp.But the Admin should have very strong technical knowledge to operate this webapp.

**2.4 General Constraints**

We have to use ReactJs to make the frontend instead of vanilla Javascript

Because we can not reuse pure Javascript components again.This WebApp has to work on all browsers.

**2.5 Assumptions and dependencies**

We will use shadcn for the making of frontend and integrate with the WebApp.We might use College Database(if any) via API.

**3. Specific Requirements**

**3.1 Functional Requirements**

A) The WebApp should have safe login/logout options

B) The system should show attendance to the students and the option to mark attendance to teachers

C)The system should have the option to upload study materials and access them

D)The system should send important notifications to students and teachers

E)The System should handle the internal marks of Students

**3.2 External Interface Requirements**

The Webapp should be compatible with any browser on any pc and mobilephone.It requires a stable internet connection from the user to run smoothly.

**3.3 Performence Requirements**

The System should run seamlessly and have the ability to handle 800-900 concurrent user at a time and response time should be less than 2000ms.

**3.4 Design Constraints**

We will primarily use MERN(MongoDb,ExpressJs,ReactJs,NodeJs ) to make this Student Life Management System. We will use ReactJs to make frontend of the system(e.g.-User Interferece of all the three type of users).We will use ExpressJs to create routers where the user can do different tasks on different routers(e.g.- /assignments ,/attendance,/ExamTable),NodeJs will be working as a runtime environemt for the application.We will Store all the users data with the help of MongoDb Database.

**3.5 Non-Functional Requirements**

The password at the time of login should be encrypted properly.We will use SSL to make sure the WebApp Link is Safe.The backup of the database should also be done time to time.The system should be available 24\*7 through out the year.