Software Requirement Specification

| Project Title | Online Tutorial Management |
|---------------------|-----------------------------------|
| Domain Group Number | |
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| | |

Project Overview:

Information Technology has revolutionized the way we go about doing our daily activities. The web for instance has revolutionized the way information can be accessed thereby making the world a global village.

The impact of information technology has grown to the level that virtually all domains of life now has everything in Electronic. Now we have E-Commerce, E-Examination, E-Voting, E-Registration. The availability and deployment of all of these is made possible with the use of the Internet (the biggest of all the Computer networks), a local area network (intranet) for deploying E-Solutions within a restricted locality e.g. an office, telephone lines (using radio wave as its medium).

Of interest also is the advent of information technology enabled devices such as the handsets, the PDAs and tablets that is used with the aforementioned web technology which makes the paradigm of information storage, access and retrieval to be mobile.

The Internet is a wide area network consisting of over five hundred million hosts that can be accessed via a workstation that is connected to its service. It serves as a medium of connection between millions of peoples, airlines, organizations, military, educational institutions and government in the most remote of areas all over the world. It serves as an electronic transmission medium to engage in exchanging of information, also aiding transportation (digitally) from location to location connecting users online. Also, the internet is a very good platform for advertisement and awareness of any product.

Information is obviously the most prominent function of the internet. The internet has grown from its inception into a giant warehouse of information, providing millions of people access to any information required by just a click of a button. It exposes one to a wide range of information resources, thereby posing as a giant database stacked with information.

Due to the universal access of the internet, student tutorials and learning activities can be processed over the web.

The project work which is focused on modeling and designing an Online Tutorial System through the Web. For the benefits of the students in the university; the online tutorial will include registration of students like their personal information and also made available video and audio type document for downloads, realtime communication between students and tutors.

The registration data of the students are stored in a highly secured Relational Database Management System (RDBMS) and the students are provided with a Graphical User Interface (GUI) to communicate with the database.

- Now a days Tutorial Points are becoming useful to the students who are in the search of quality education. So, this application provides the support for both the tutors and students. The Admin is the head of this application who can view the students and tutors registered into the application. Admin will add the courses. The tutors who need to be registered and login and can select the course he would like teach by providing location and timings.
- Students who also need to register and login into the application while registering student will give the location and after logging when he selects the course. The tutors available in that location and the course that tutor can teach both are matched and the request will be sent to admin. Admin will confirm the request therefore student can view the tutor details.

Product Features:

Admin:

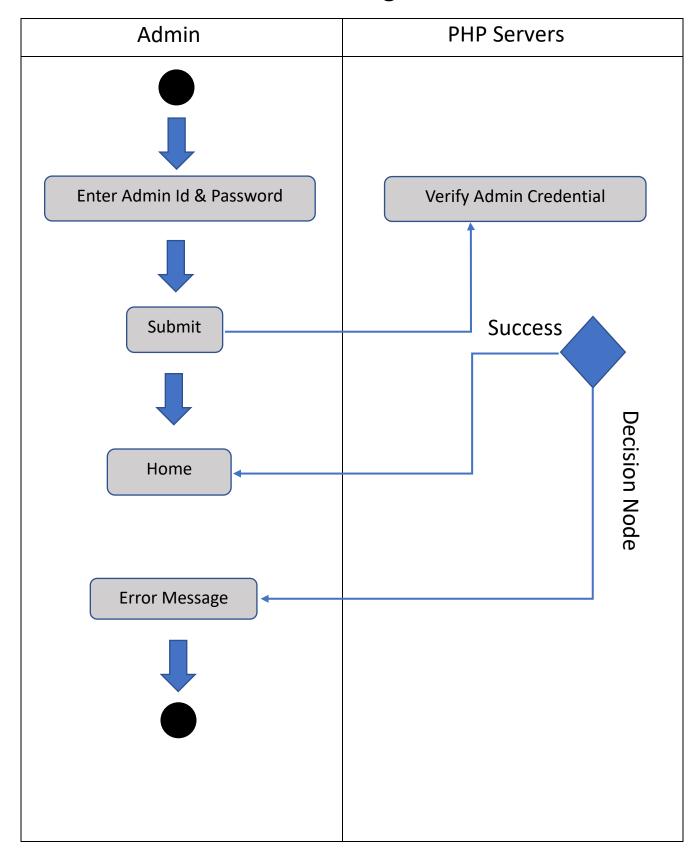
Admin will login with the default username and password. Admin can view the registered tutors and students. He can also view the requests from tutors. Admin will confirm the requests then the details of tutors are shown to student and the tutor will be assigned to student.

Tutor:

Tutor will login and register into the application by giving the username and password, after logging in tutor will select the course and location and the timings with his availability. If any student requests were there in that locality the tutor will be assigned to student.

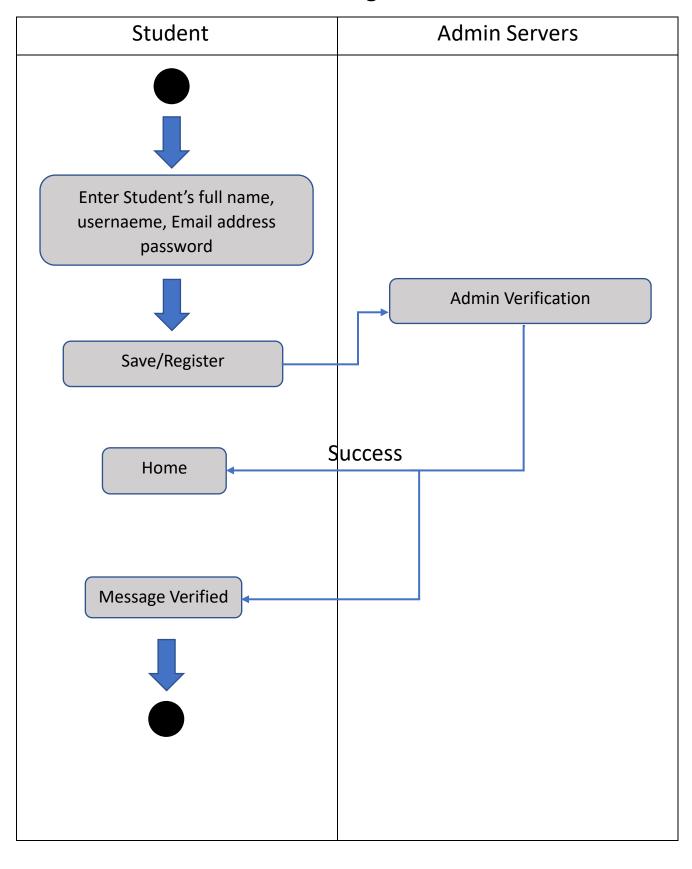
Student: Student will register and login into the application by giving username and password and student need to select the course and timings and if any tutors available in that area the request will be forwarded to admin, admin will confirm the request the tutor will be assigned to student.

Admin Login



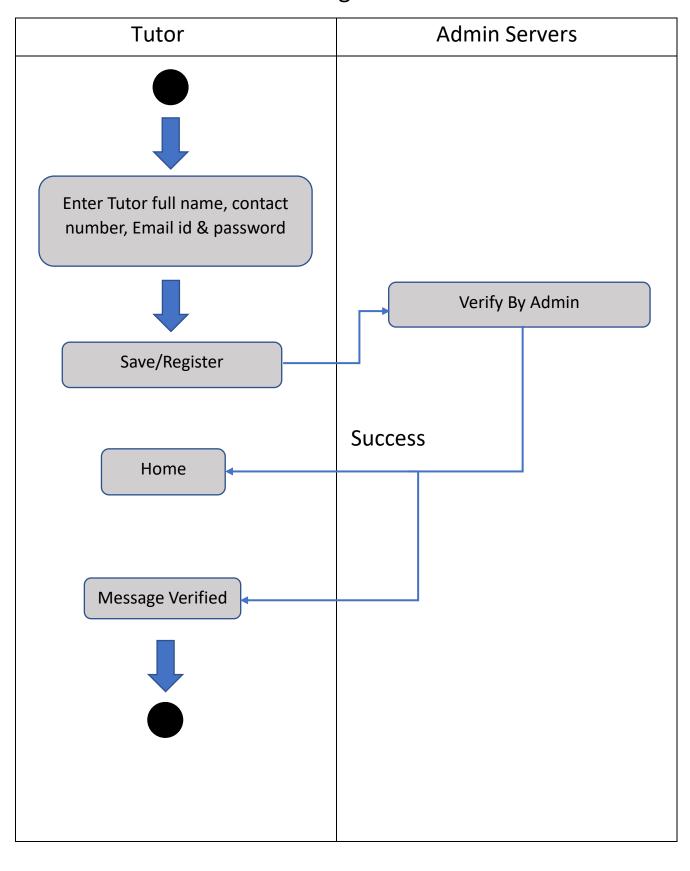
| Use Case ID: 01 | Use Case Name: Admin Login |
|-------------------------|---|
| Description | The admin can log in to the Online Tutorial website, through any devices to access the website online. After logging in, admin should click the submit button Meanwhile the credentials of admin will be verified if it's correct the admin will directly go to the home page or else error message will pop on the screen. It is mandatory to have an account to access the application and its facilities. |
| Actor | Admin |
| Preconditions | Admin should have a valid account in the Online Tutorial System. |
| Post conditions | Admin will be logged in. |
| Frequency of Use | HIGH |
| Normal Course of Events | The admin opens up the website named as Online Tutorial System through their respective devices. Opening up the website admin will be redirected to the login page which contains various filling up fields to be provided by the client or the user. The admin will provide the ID which is unique throughout the software. Admin will fill the Admin ID Field & the password field. After Successful Login, Admin should be navigated to the Home Page. If the credentials are wrong, admin will be redirected displayed with a message "INVALID USERNAME OR PASSWORD". |

Student Registration



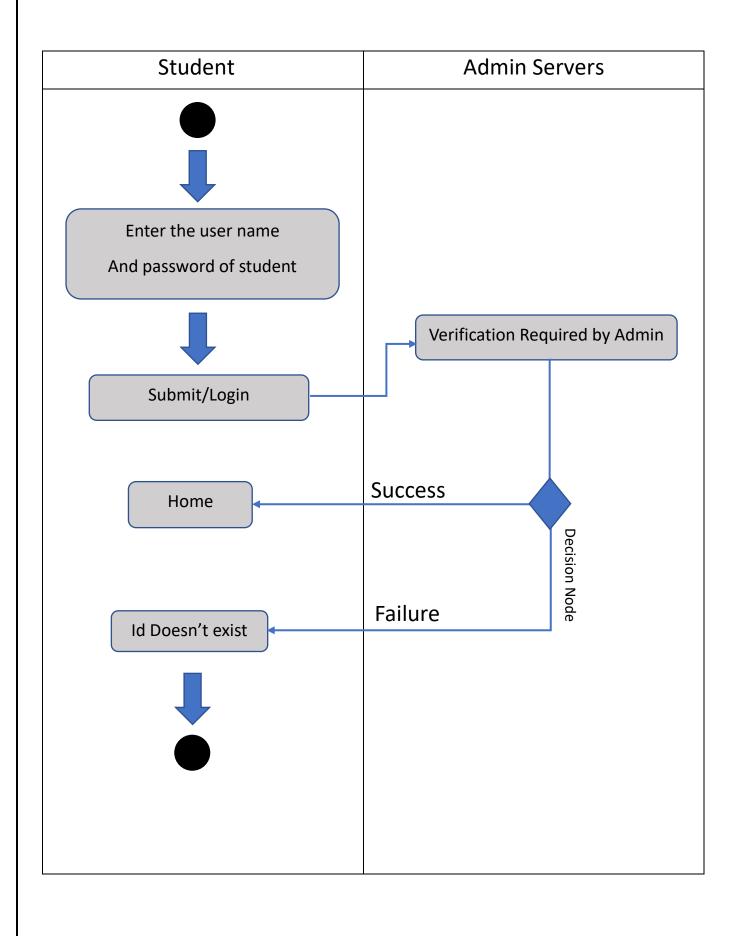
| Use Case ID: 02 | Use Case Name: Student Registration |
|-------------------------|---|
| Description | Student's should open the website and complete the registration process. For signing in, student should provide their full name, username, email address, contact number, password and press the save button and then press submit button. Meanwhile the credentials of student's will be verified if it's correct the student will directly go to the home page or else error message will pop on the screen. It is mandatory to have an account to access the application and its facilities. |
| Actor | Admin |
| Preconditions | Student's should have a valid account in the Online Tutorial System and provide their valid details to the website. |
| Post conditions | Student's will be Registered. |
| Frequency of Use | HIGH |
| Normal Course of Events | The Student opens up the website named as Online Tutorial System through their respective devices. Opening up the website student should be redirected to the registration page which contains various filling up fields to be provided by the admin or the user. The student will provide the ID which is unique throughout the software. Student should fill the student full name, username, email address, password, contact number. After Successful Registration, Student should be navigated to the login Page. |

Tutor Registration



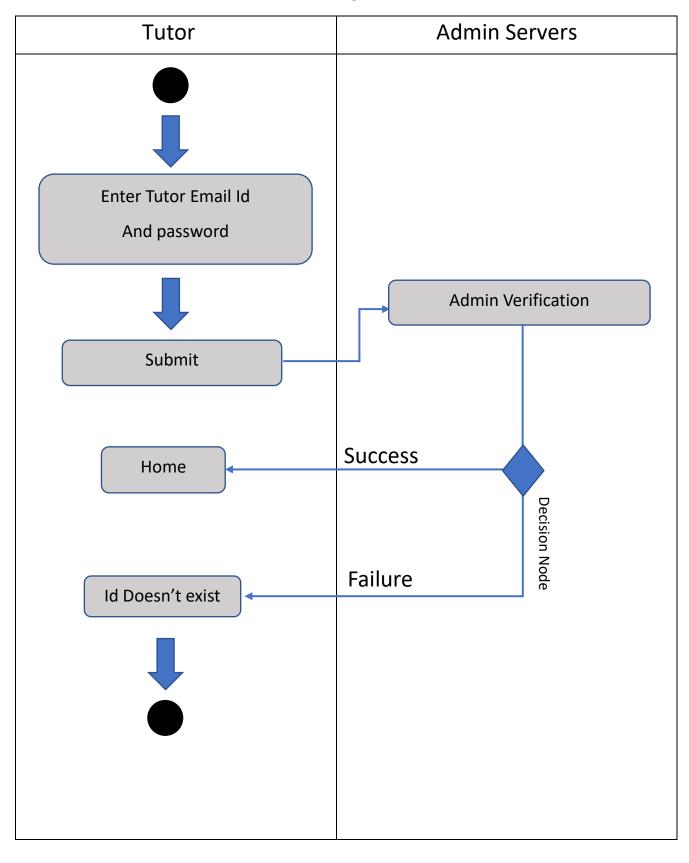
| Use Case ID: 03 | Use Case Name: Tutor Registration |
|-------------------------|---|
| Description | Tutor should open the website and complete the registration process. For signing in, tutor should provide their full name, email address, contact number, password and press the save button and then press submit button. Meanwhile the credentials of tutor will be verified if it's correct the tutor will directly go to the home page or else error message will pop on the screen. It is mandatory to have an account to access the application and its facilities. |
| Actor | Admin |
| Preconditions | Tutor should have a valid account in the Online Tutorial System and provide their valid details to the website. |
| Post conditions | Tutor will be Registered. |
| Frequency of Use | HIGH |
| Normal Course of Events | The Tutor opens up the website named as Online Tutorial System through their respective devices. Opening up the website tutor should be redirected to the registration page which contains various filling up fields to be provided by the admin or the user. The tutor will provide the ID which is unique throughout the software. Tutor should fill the full name, username, email address, password, contact number. After Successful Registration, Tutor should be navigated to the login Page. |

Student Login



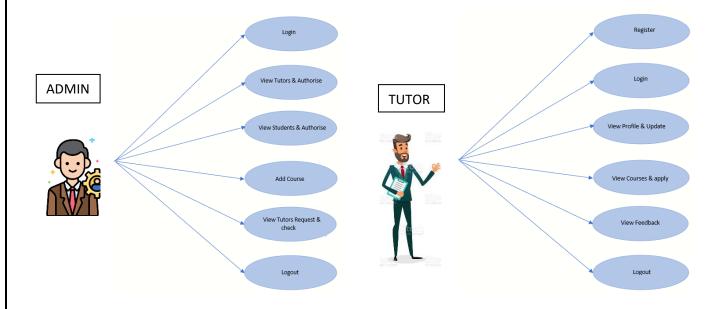
| Use Case ID: 04 | Use Case Name: Student Login |
|-------------------------|---|
| Description | The Student can log in to the Online Tutorial website, through any devices to access the website online. After logging in, Student should click the submit button. Meanwhile the credentials of student will be verified it it's correct the student will directly go to the home page or else error message will pop on the screen. It is mandatory to have an account to access the application and its facilities. |
| Actor | Admin |
| Preconditions | Student should have a valid account in the Online Tutorial System. |
| Post conditions | Student will be logged in. |
| Frequency of Use | HIGH |
| Normal Course of Events | The student opens up the website named as Online Tutorial System through their respective devices. Opening up the website student will be redirected to the login page which contains various filling up fields to be provided by the client or the user. The student will provide the ID which is unique throughout the software. Student will fill the ID Field & the password field. After Successful Login, Student should be navigated to the Home Page. If the credentials are wrong, student will be redirected displayed with a message "INVALID USERNAME OR PASSWORD". |

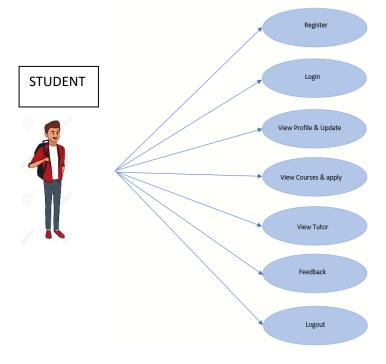
Tutor Login



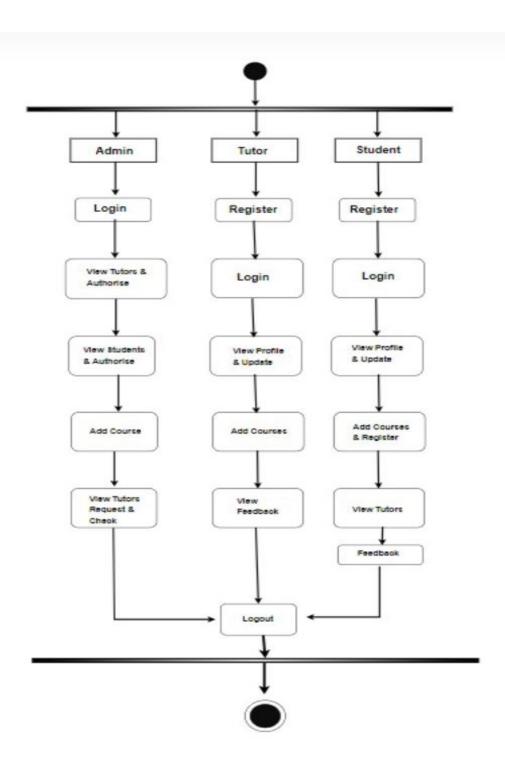
| Use Case ID: 05 | Use Case Name: Tutor Login |
|-------------------------|---|
| Description | The tutor can log in to the Online Tutorial website, through any devices to access the website online. After logging in, Tutor should click the submit button. Meanwhile the credentials of tutor will be verified if it's correct the tutor will directly go to the home page or else error message will pop on the screen. It is mandatory to have an account to access the application and its facilities. |
| Actor | Admin |
| Preconditions | Tutor should have a valid account in the Online Tutorial System. |
| Post conditions | Tutor will be logged in. |
| Frequency of Use | HIGH |
| Normal Course of Events | The tutor opens up the website named as Online Tutorial System through their respective devices. Opening up the website tutor will be redirected to the login page which contains various filling up fields to be provided by the client or the user. The tutor will provide the ID which is unique throughout the software. Tutor will fill the ID Field & the password field. After Successful Login, Tutor should be navigated to the Home Page. If the credentials are wrong, tutor will be redirected displayed with a message "INVALID USERNAME OR PASSWORD". |

Use Case Diagram:





ACTIVITY DIAGRAM:



| Admin | |
|---------------------------------------|---------|
| Username: | varchar |
| password: | varchar |
| +login | 0 |
| +View tutors and authorize | 0 |
| +View students and authorize | 0 |
| +add course | 0 |
| +view tutor request and Check | 0 |
| +logout | 0 |

| Tutor | |
|---|---------|
| Username: | varchar |
| password: | varchar |
| +register | 0 |
| +login | 0 |
| +View profile and Update | () |
| +view courses, add courses and apply | () |
| +view feedback | () |
| +logout | 0 |

| Student | |
|---------------|---------|
| Username: | varchar |
| password: | varchar |
| +register | () |
| +login | () |
| +View profile | () |
| And | |
| Update | |
| +view courses | 0 |
| and | |
| apply | |
| +view tutor | () |
| feedback | |
| +logout | () |

Technical Specifications:

Hardware:

• **Processor:** i3 8th gen or more

• HardDrive: 512 GB or more

• RAM: 2GB or more

Software

• **Technologies:** Servlet, JSP, Node Js

Operating System-Windows 10/11, Eclipse EE, JDK
 1.8

• Database: Mysql

• Server: Apache Tomcat, XAMM Server

• Frontend: Html, Css, Javascript, ReactJs

• Browser: Google Chrome, Microsoft Edge

