TEACHER MANAGEMENT SYSTEM AND CONTENT MANAGEMENT SYSTEM
(Internship)

A report submitted to the Rajiv Gandhi University of Knowledge Technologies in partial fulfilment of the degree of Bachelor of Technology in Computer Science.

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CERTIFICATE FOR PROJECT COMPLETION

This is to certify that the report entitled **" INTERNSHIP REPORT ON TEACHER MANAGEMENT SYSTEM AND CONTENT MANAGEMENT SYSTEM"** submitted by P.Anitha(R171019), under our guidance and supervision for the partial fulfillment for the degree Bachelor of Technology in Computer Science and Engineering during the academic semester -2 2021-2022 at RGUKT, RK VALLEY To the best of my knowledge, the result embodied in this dissertation work have not been submitted to any University or Institute for the award of any degree or diploma.

Project Internal Guide   **Head of the Department**

Ms.P.Udaya Sree   Mr.N.Satyanandaram
Assistant Professor   HOD CSE
RGUKT RKVALLEY   RGUKT RKVALLEY

DECLARATION

I hereby declare that this report entitled **"INTERNSHIP REPORT ON TEACHER MANAGEMENT SYSTEM AND CONTENT MANAGEMENT SYSTEM"** submitted by us under the guidance and supervision of P.Udaya Sree is a bonafide work. We also declare that it has not been submitted previously in part or in full to this University or other University or Institution for the award of any degree or diploma.

Date:

Place: RK Valley

P.Anitha --R171019

Computer Science and engineering

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I would like to express my sincere gratitude to P.Udaya Sree (Asst.Prof, CSE) my project guide for valuable suggestions and keen interest throughout the progress of the project and Turito for the internship oppurtunity which helped me experience and learn a lot on Real world industrial work. I am also grateful to N.Satyanandaram, HOD CSE, for providing excellent computing facilities and a congenial atmosphere for progressing with my project.

At the outset, I would like to thank Rajiv Gandhi University of Knowledge Technologies, RK Valley for providing all the necessary resources for the successful completion of our project.

With Sincere Regards,
P.Anitha—R171019

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ABSTRACT

The aim of this project report is to give a brief idea on how Turito and most other e-learning platforms insert, update, manage and manipulates their bulk content using CMS platform and how they organise and manage their teacher-student realtions and primarly teachers data using a TMS platform. At the end how the code is deployed into the different environments like development environment which the developers use to test themselves and the test environment which the testing team uses to test the application against the requirements document.

1.Introduction

TMS:

The Teacher's Management System is the essential digital platform **for organizing teaching activities**. It helps in planning sessions, recording student's information and it generates performance reports with just a click.

It is also considered to be a dynamic system that **enables teachers to stay involved in each student's progress every step of the way**, informing teacher instruction and guiding differentiated learning.

CMS:

Content Management System(CMS) for the website **allows us to have control of our website content**. It means having the ability to update, change or delete any images, text, video, or audio. It allows us to keep our site organised, up to date and looking great. So many websites never review their content after launch.

A CMS solution is a better option if you're creating a large website with multiple pages, or if you plan **to make changes or additions to your website down the line**. That's because a CMS will make it easier to do things like edit existing pages, publish new pages, add an online store, create web forms and so forth.

JENKINS:

Jenkins is an open source automation server.
Jenkins facilitates **to continuous integration and continuous delivery in software projects by automating parts related to build, test, and deployment**. This makes it easy for developers to continuously work on the betterment of the product by integrating changes to the project.

Jenkins is used to build and test your software projects continuously making it **easier for developers to integrate changes to the project, and making it easier for users to obtain a fresh build.**

Tools Used:

Eclipse
Visual Studio Code(VS code)
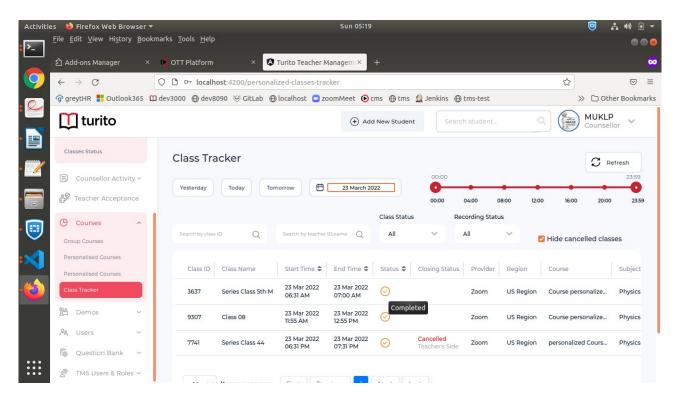Jenkins
Technologies: Angular, Scala, Akka framework

2.TMS

2.1 Personalised Class Tracker

Description: Personalised Class Tracker in tms(teacher management system) platform is to display all the one-on-one(personalised) classes on a particular date.

Process flow:

In the **Personalised Classes Tracker**, we added the following features,

1. Date filter (yesterday, today, tomorrow and a date-picker calendar to select any date)
2. time range select slider
3. teacher search bar using class id
4. teacher search bar using name/ID
5. filters like Class status(Completed, Cancelled, Rescheduled) and Recording Status(Enabled, Disabled)
6. Tabular view with the following columns:
   - Class ID
   - Class name
   - Start time
   - End time
   - Status(class started or not-started)
   - Closing status(completed, cancelled or rescheduled)
   - Provider(whiteboard if the class is offline, zoom if the class in zoom)
   - Region
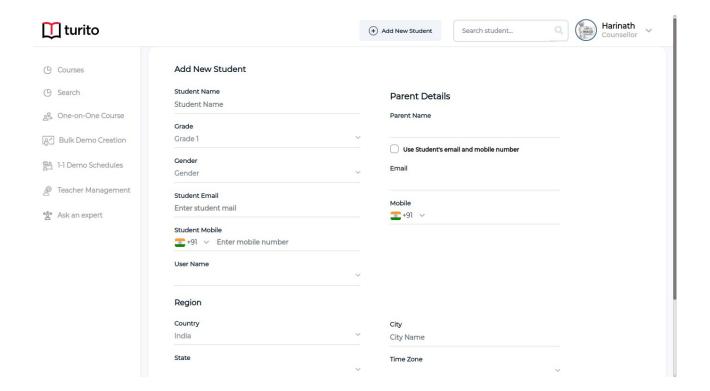
2.2 Create and Edit Student

Description: In Add student Page we create a form having fields related to student details. Some are mandatory fields to create a student under TMS. Some are optional for other purposes. Parents also able to view their child progress. So, we are linking parent account to student account. We collect all the data and store it in database.

Process Flow:

Inside the Home page select Add student Button, added the following:

- Student Details
- Region
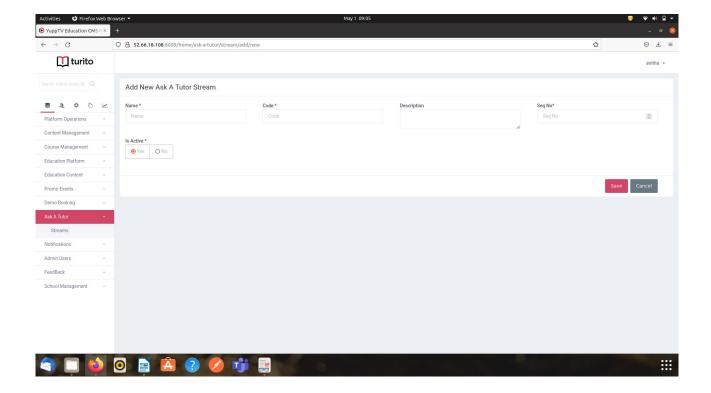- Parent Details (Optional)
- Grade
- Time Zone

2.3 Ask A Tutor:

Description: In Ask A Tutor tab We can schedule Expert Session Streams to a Student. By Selecting Add Expert Stream We can schedule a Session with a tutor for a child by adding required fields .

Process Flow:
In the ask a tutor tab we can select Add new Expert session stream,add the following fields.

- ■ Name of the Session
- ■ Code
- ■ Description
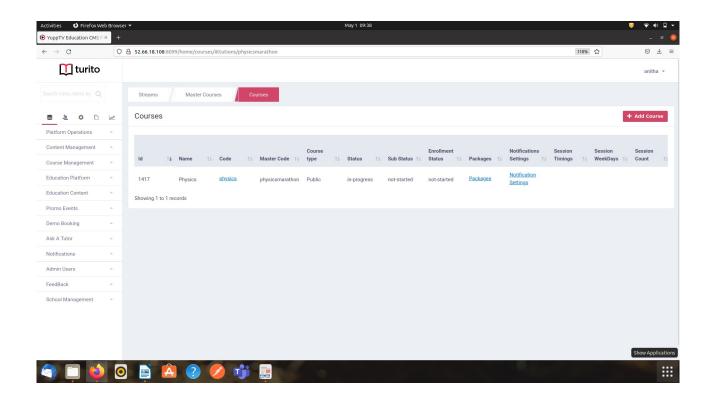- ■ Sequence Number
- ■ Is Active
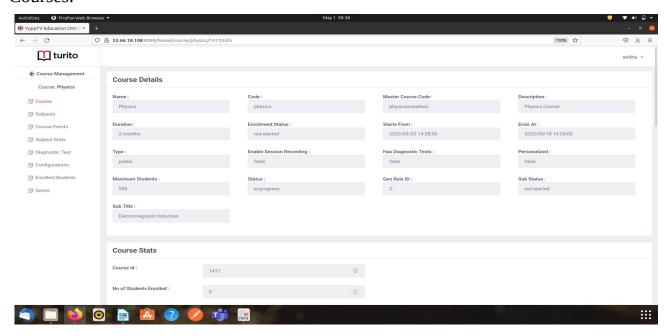
2.4 Course Management:

        In TMS home page we will find a Course Management tab in that we can select the Course operations. The main fuction is to operate and handle all the course operations that are provided by the platform.The Course Management is to Add streams and courses that has been offered on e-learning platform and in that courses we have subjects and in the subjects we have content to be viewed in the particular subject.

Process Flow:

- ■ Master Stream
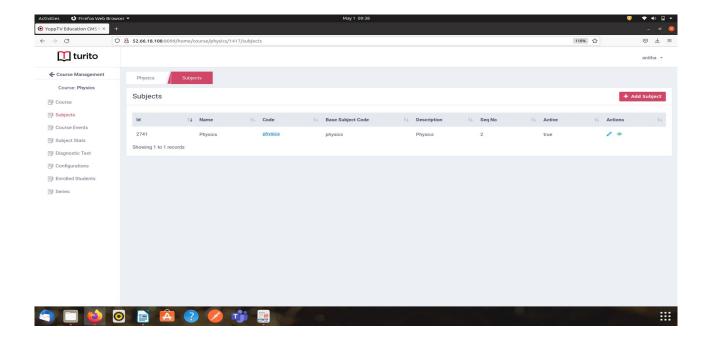- ■ Master Course
- ■ Course
- ■ Subjects
- ■ Content

Courses:

Subjects:

In courses we have different Subjects and for each subject we have content.
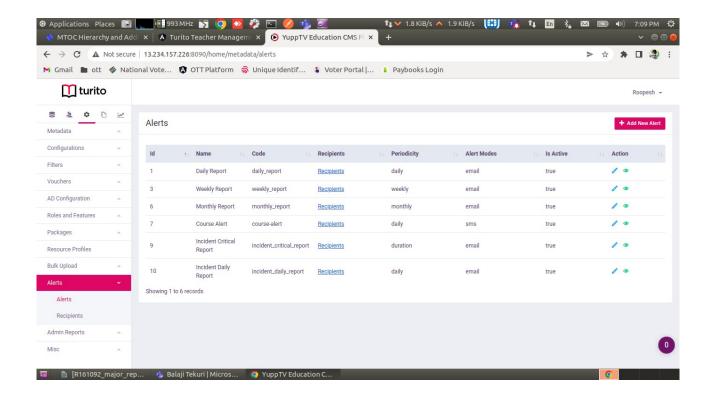
3. CMS

3.1 Alerts and Recipients

Description: Alerts and Recipients is a Feature used to identify the error or report that occur in backend and send the alerts to the respective recipients who works on it.

There are different types of alerts like daily report, weekly report, monthly report and some technical issues related alerts. Here the main intention of the feature is to send the alert of respective report to the person who works on the report related issues.

Here this is the page we organise alerts related functionalities like.
- Displaying Alerts and its additional fields.
- Add alert.
- Navigate to respective recipients to the alerts.
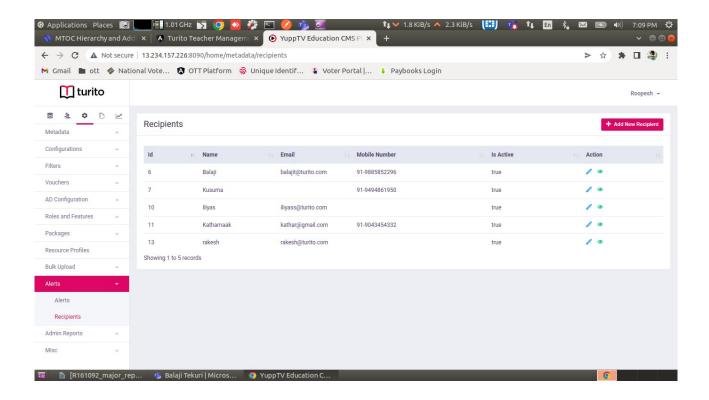- Edit the alerts.

Recipients:

   Description: Recipients page is a where we can see all recipients and their profile details.

   Here this is the page we organise Recipients related functionalities like.
   - ■ Displaying Recipients and its additional fields.
   - ■ Add new recipient.
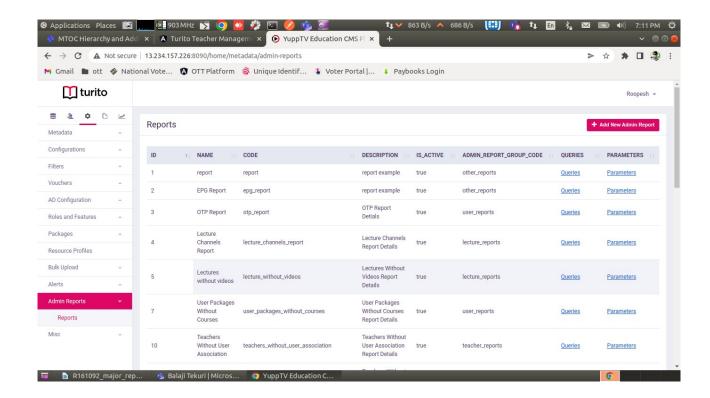   - ■ Edit the Recipient.

3.2 Reports:

Description: Whenever a issue or error occured in live. backend generate an report and store it in database. The generated report have the details like error type , description and group code.

Here this is the page we organise Reports related functionalities like.
- ■ Displaying Reports and its additional fields.
- ■ Add Report Manually.
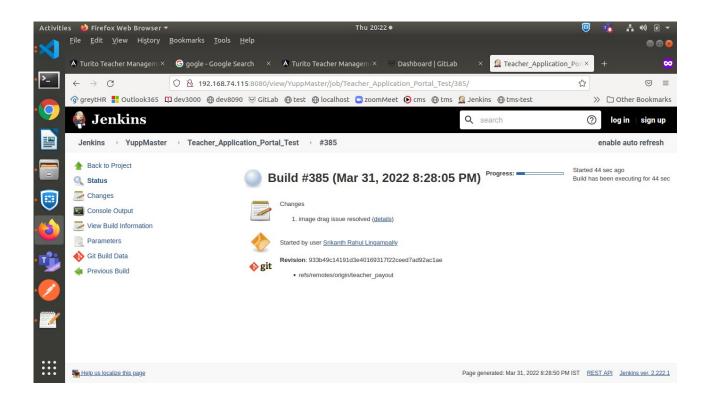- ■ Navigate to respective Queries and Parameters to the Reports.
- ■ Edit the Report.

4. JENKINS

Jenkins is a server-based system that runs in servlet containers such as Apache Tomcat. It executes repetitive tasks, saves time and optimizes developing processes. Jenkins facilitates to continuous integration and continuous delivery in software projects by automating parts related to build, test, and deployment.

Builds can be triggered by various means, for example:
- A webhook that gets triggered upon pushed commits in a version control system
- Requesting a specific build URL.
- After the other builds in the queue have completed
- Invoked by other builds

Steps to Deploy Your Code:
1. Login
2. Select the environment
3. Go to parameters
4. Select the branch you want to deploy
5. Progress bar on top right displays the depolying status.
Once the deployment is done, the build/changes can be seen in that respective environment.

Handling errors while deploying build,
If there are errors uncaught by ng-build in local environment, Jenkins could catch such errors too.
Using the below node command we can view the errors,
node --max_old_space_size=8192 'node_modules/@angular/cli/bin/ng' build --prod --build-optimizer
After fixing the errors/bugs, the code becomes a new build and that is deployed through the steps to deploy in the environment.

5. Conclusion

As in the learning process of "Internship report", we have studied about Angular frameworks, Scala language, Akka framework, Akka Actors and their communication system. We have created and deployed several successful modules in TMS and CMS which could better the utility for the teachers, counsellors in TMS and users of CMS. In future also, the work can be further on enhancing the Turito website focusing on building a strong foundation for academic success while providing a new-age learning platform by integrating the latest technology in teaching methodology.

6. References

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