

Instant MMLS Notifications



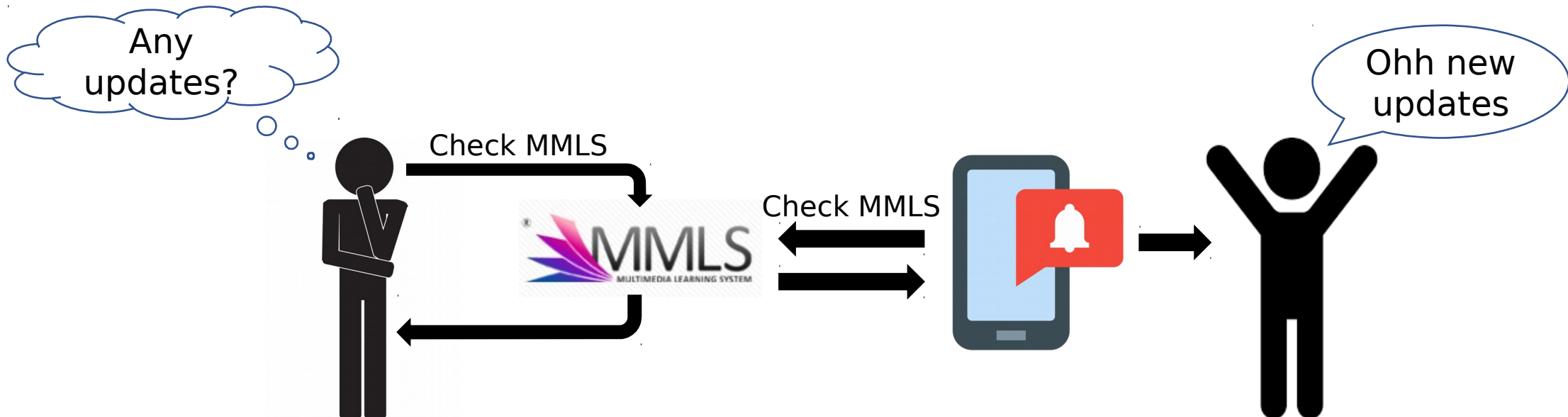
Why IMN? Why Notifications?

People want to know when something new happens that affects them

- Class cancelled
- Assignments
- Test results
- Lecture notes, tutorials
- Any updates

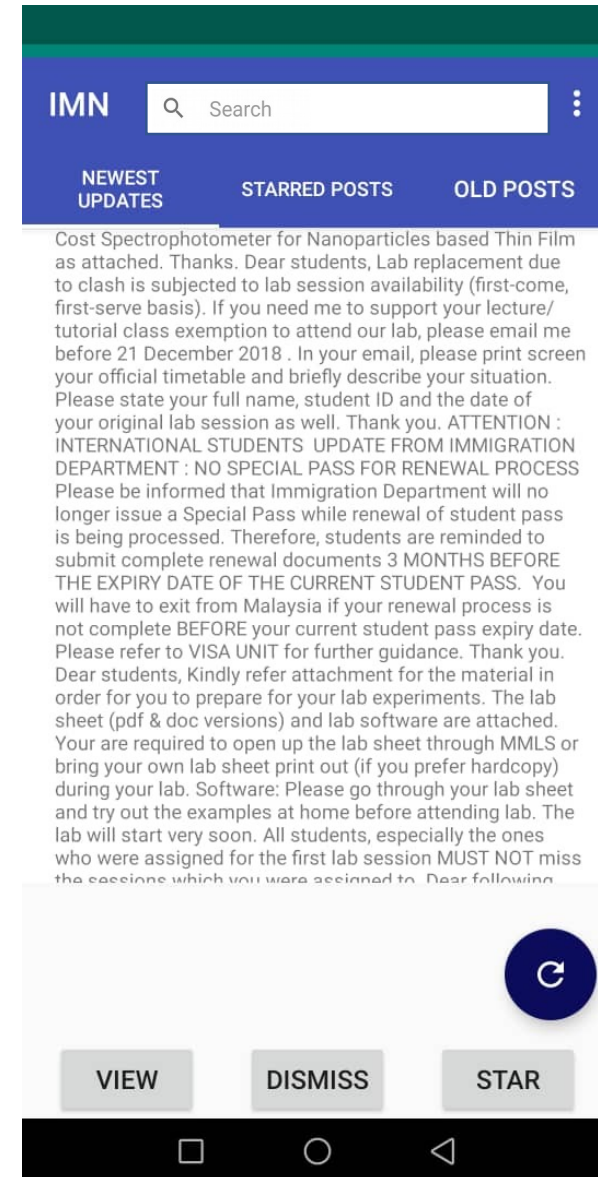
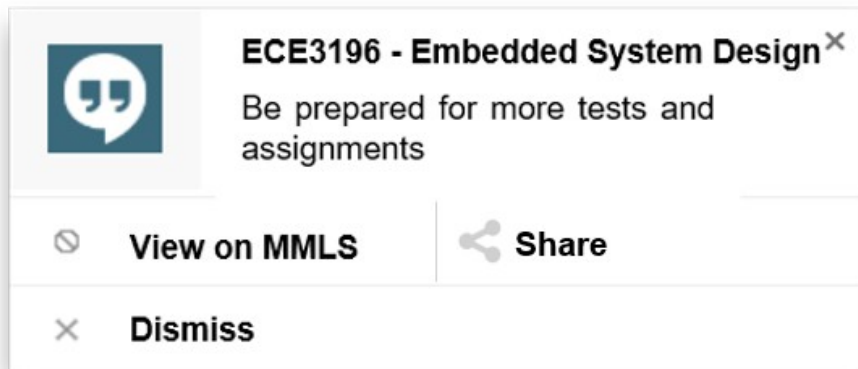


You didn't check MMLS?



Features

1. Periodically check for updates
2. Share on social media
3. Offline mode – Store data on local device
4. 'Star' Important Posts
5. Search and Sort



Arising Problems

- Authentication into MMLS

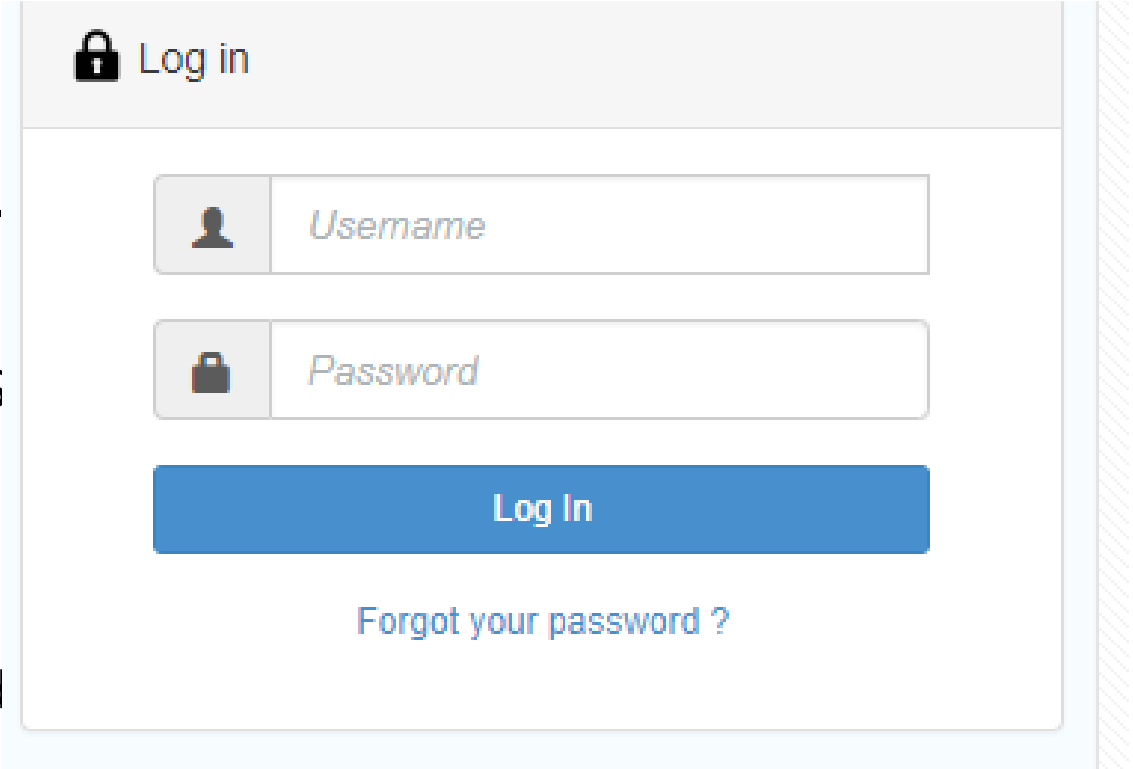
To obtain information of students current course of study, our apps must have the ability to log in into the MMLS homepage. [3rd party access constraint]

- Data display

From web scraping of the student's MMLS page, the data obtained is unstructured and is in unrepresentable form.

- Converting Java programs into Android apps

With all the functionality and data formed through Java script, the difficulty faced during the integration into multiple XML files



The image shows a login interface for the MMLS system. At the top, there is a header bar with a lock icon and the text "Log in". Below this, there are two input fields: the first is labeled "Username" with a person icon, and the second is labeled "Password" with a lock icon. Below the password field is a blue button labeled "Log In". At the bottom, there is a link that says "Forgot your password ?".

Solutions to overcome

- Authentication into MMLS

Generate the required login headers for the POST form to obtain the session cookies and login token

- Data display

Using Jsoup, open-source Java library designed to parse, extract, and manipulate data stored in HTML documents.

- Converting Java programs into Android apps

Multiple tedious and strenuous steps to be taken to define the user interface in XML, access and process the data in the user interface controls .



Project Member's Roles

**Project
Manager**

**Project
Planner**

**Role
S**

**Sales
Engineer**

**Product
Owner**

**Software
Develope
r**

Project Manager

- General project **administration**.
- Progress and resource **monitoring**.
- **Overseeing** the production and development of project deliverables.
- **Acquiring support** and **advice** to further enhance project output.
- Host and **conduct meetings**

Project Planner

- **Planning timeline** of the project.
- **Estimate resources** required by the project and the members
- **Joint** management duties along with **the Project Manager**
- **Identify specific activities** that is required **to be performed** during the project.
- **Drafting** of the **software development model**

Sales Engineer

- **Analyze** and **identify** business requirements.
- Perform **estimates on project costs**
- **Analysis** on the **cost-benefit ratios**
- Obtain **acceptance** by means of presentation or **demonstrating** to the **end-users**
- **Prepare sales report** by collecting and processing the information acquired from the project

Product Owner

- **Analyze market trends** and provide suggestion to the team.
- **Communicate** with the **end users** of the production.
- Maintain **communication** with the stakeholders of the product.
- Provide **insightful feedback** to the project team
- **Aiding the team** to continuously improve their methods.

Software Developer

- **Designing** the **flowchart** and the design **block diagrams** of the product
- Implementation of the software architecture in code set forth by the project members.
- Provide **insights** regarding the technicalities of the implementation of the ideas onto code
- Combining the elements and modules to **perform testing and verification**.
- Ensure the **adaptability** and **flexibility** of the program.

Software Developer

- Ensure **quality** of the project through extensive **testing and feedback**.
- Develop **methods and functions** to aid the development process
- **Maintain** and produce **quality software**.
- Maintain excellent version control of software
- **Documentation** to the software.
- Provide **feedback** on the process and product of the project through **auditing**.

Showcase of App

