

# DASS Project Concept

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**Project :** Recommendation Engine

**Client :** Dheeraj sir @ GradWise

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## 1 Project Description

We are tasked with building a "Recommendation Engine" for the educational courses provided by GradWise such that it caters to the varying learning curves for every user as well as regulates it in order to achieve a smooth & effective learning process

In that, we need to create recommendations for students & other end-users with respect to the various activities per courses like

- if test results suggest that the student should be moving ahead in the course content
- if the student lacks practise & does not hold enough expertise in a particular topic then we need to recommend more practise to him (eg. quizzes, tests, revision of lectures & notes etc.)
- whether to revise a pre-requisite of the upcoming topic or to directly proceed further
- passive suggestions to the user to gain even more expertise in previously gained skills & topics via even more practise and tougher tests

The main difference between GradWise's model and that of any other content providers in current market is that GradWise follows a Learner-Centric model while the others follow a Delivery-Centric model. Thus, this gives GradWise a novel edge over other competitors in the market.

Below given are our current project scope and concept sketch of where exactly and on what aspect of the product will we be working on and try to develop!

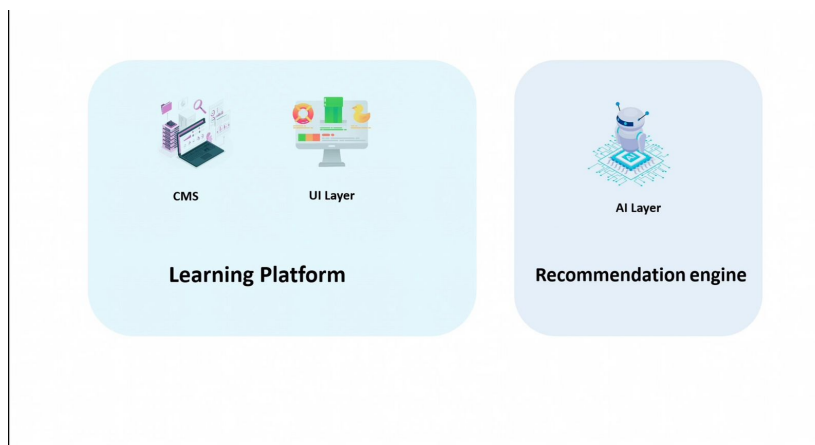


Figure 1: Project scope

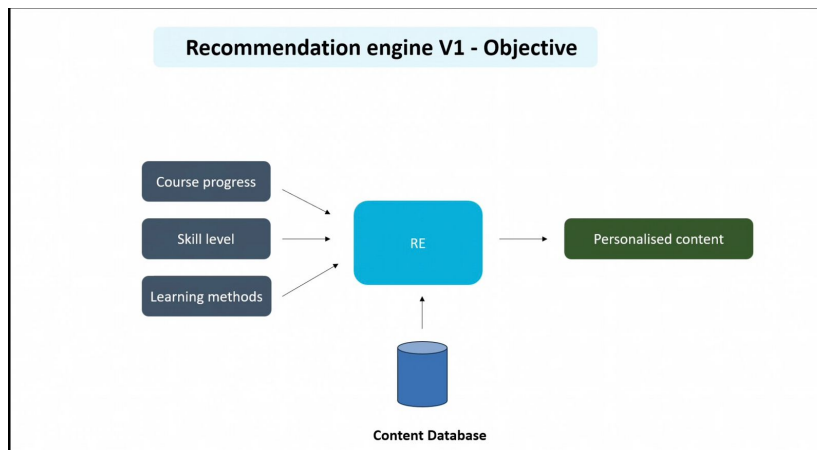


Figure 2: Concept sketch

As we can see in the above sketch, RE (Recommendation Engine) will be working on 3 major aspects of the users :

- **Course progress**
- **Current skill levels for variety of topics**
- **Learning methodologies modified with different courses**

## 2 User Profiles

The users of GradWise fall under the category of students taking up graduate & post-graduate education. It not only provides courses for students with engineering background but also provides equal support in the learning process to the students pursuing various other fields like Business Studies, Finance, Marketing etc.

GradWise provides services to 2 kinds of end-users as mentioned below:

### 2.1 Educational Institutions

Various categories of educational institutions like tech institutes, engineering institutes, those providing high-school education, institutes with multiple options for further studies, foreign exchange organisations etc.

### 2.2 Individual End-users

Future aspects of the company also aim to target individual learners spread across everywhere. This increases the reach of the product and helps more & more students to get benefits out of it

## 3 Usage model & Diagrams

The user's learning journey starts from the ground basics and goes ahead by completing the concepts, trying to revise the previous ones and attempting tests for the same with enough practise to get better hands-on.

Further, we have been also shared with the outline of current GradWise product which is as below:

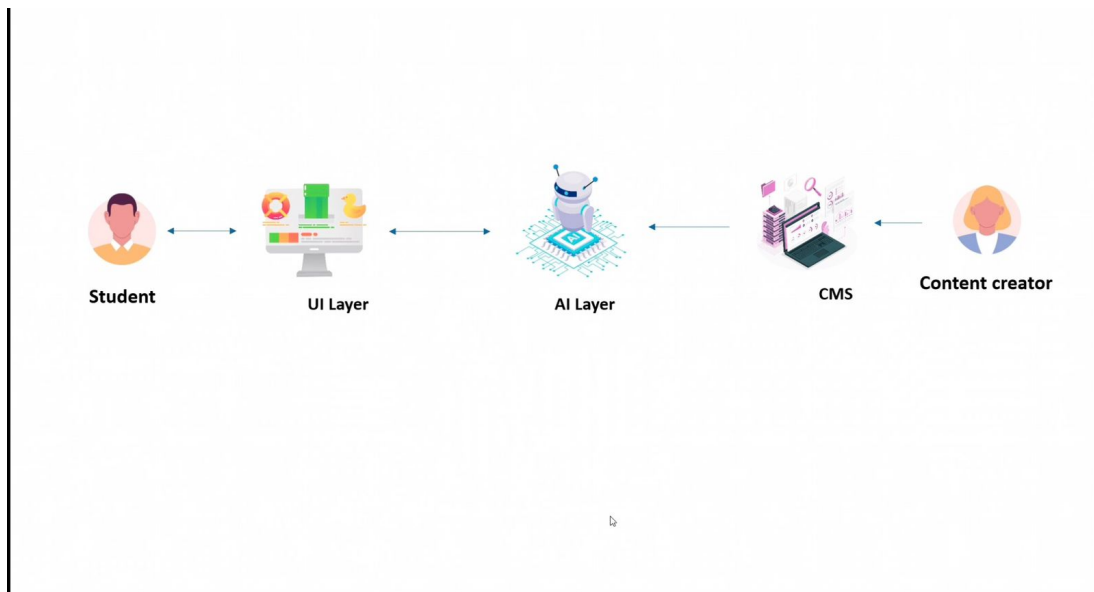


Figure 3: GradWise Outline

## 4 Learner-Centric model

A learner-centric educational model is inverted from the traditional model, as it shifts the focus from teacher-led instructions based environment to active, personalized and student-driven learning

### *#PuttingStudentsFirst*

Here are some of the key highlights about the model:

- **Individualized learning** : acknowledges and caters to diverse learning styles, backgrounds, and paces
- **Active engagement** : promotes hands-on exploration, problem-solving, and critical thinking rather than passive knowledge ingestion
- **Meaningful feedback** : provides ongoing, personalized feedback to guide and motivate learners

## 5 Delivery-Centric model

The traditional delivery-centric educational model rather prioritizes the efficient & effective delivery of pre-defined content as the primary driver of learning.

### *#ContentAtForefront*

Some of the key highlights about this model are as below:

- **Standardized curriculum** : follows a structured syllabus and established learning progression across all students
- **Uniform pace and expectations** : all students progress through the same material at the same time
- **Teacher-led instructions** : relies heavily on lectures, explanations, and demonstrations by an expert instructor

*Overall, both of the methodologies of education imparting have their own pros & cons and it becomes completely subjective of the institution/company to decide a particular model that will be the best suitable for their approach to a set of problems that have set out to solve.*