

# This is graded project for the course Modern Application development 2 (MAD2) at IITM

## Introduction

This project is a SPA (single page application) designed using VueJS. Data at UI is being populated via API call.

## Author

- Manish Kumar
- 21F1006597
- I'm passionate to write code from scratch, but also like library and framework

## Description

- A user can register then create a deck and add cards to it.
- He/She can choose a deck to review
- Each card in a deck will have question and answer (hidden)
  - He has to think and recall the answer
  - He can verify the answer by clicking on `show answer` button
  - Now he can submit response by selecting difficulty of that question
  - Depending on the difficulty selection, that question will be shown after a predefined time-interval

## Technologies used

### Frontend

- JavaScript
- VueJS 2
- Vue Router
- HTML
- Bootstrap
- CSS

### Backend

- Programming language - Python
- Library
  - flask - For Server
  - flask-restful - API design
  - jwt - Authentication (json web token)
  - datetime
  - sqlite3
  - redis database - for caching and celery broker
  - celery - for async batch jobs
- Templating - Jinja
- Database - SQLite
- ORM - flask-sqlalchemy

## Structure of the project

- All the controller for the request end point are present in `main.py` file
- Model for the database and table is present in `models.py`
- `static/vue/app.js` is the main controller file for SPA
- `static/vue/components` folder contains all the component for the SPA
- Redis server configuration is present in `redis_config` file
- Celery job is being handled in `schedule_job.py` file