School Application

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Description

With the wide availability access to the Internet. School administrator should take advantage of the current technology and take learning closer to home.

This application create a platform for Student to access educational materials uploaded by instructor.

Features

- Student can views current course and assignment.
- Teacher can view/edit course assignment.
- Teacher can upload files for student to download.
- Teacher can add student to course with Student ID.

Planning: User Stories

- User can create account using School ID.
- Student can log in to view assignment and weekly Agenda.
- Teacher can see who is taking the course.
- Teacher can upload paperwork for student to download.

Planning: DB and Models

- User: Identity, each user have a Profile.
- Profiles: Each profiles have additional detail about the user. Also identify Student/Teacher status.
- Students: One student can take multiple class
- Teacher: One teacher can teaches multiple class
- Class: Algebra 101, English 101, one class can only have one teacher but multiple student.

Technology Stack

- Python 3
- Django 2
- Bootstrap
- Built on AWS using Amazon Linux running EC2, MySQL -RDS, via Cloud9 Ide.

What I learned

- Python's Django 2 Framework
- Amazon's Web Service:
- Cloud environment EC2, RDS and subnet. Learning how everything connect and run.
- Identity and Access Management creating user and giving those user only the necessary credential.
- Amazon's Linux environment: a modified version of RedHat (took a while to get the right set up)

What's Next

- Extend User's Profile allowing uploading of face picture.
 Enforcement will go through AWS Rekognition. Will look up into Boto3 Amazon's SDK for python.
- Ability for instructor to upload grade. Feature will extend to include individual question. Point weighted and analytic (Which question/Category student missed most and show the category an individual student underperform.) This will be a separated Application.