Project Manager

By Rocket Sammies

Roles

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About

Project Manager is a gradebook with an emphasis on easy assignment, oversight, and grading of group projects.

Features

- Create custom rubrics
- Fill out rubrics and return them with/without comments
- Oversee projects with intermediate submissions/checkpoints
- See grading deadlines and receive notifications upon assignment submission
- Send emails to groups
- View old projects
- Grade projects

Schema

Users collection

```
[{
    "email": "user@example.com",
    "name": "John Doe",
    "password":
"5e884898da28047151d0e56f8dc6292773603d0d6aabbdd62a11ef721d1542d8",
    "type": "student",
    "classes": {
        123456: [
```

```
            "hw1-123456": 100
        ]
    }
},
{
    "email": "user2@example.com",
    "name": "John Doe 2",
    "password":
"5e884898da28047151d0e56f8dc6292773603d0d6aabbdd62a11ef721d1542d8",
    "type": "teacher",
    "classes": ["123456"]
}]
```

Classes collection
```
[{
    "id": 123456,
    "name": "Class Period 8",
    "teacher": "Jane Doe",
    "students": ["user@example.com", "user2@example.com"],
    "weights": {"homework": 0.01, "project": 0.99},
    "assignments": ["hw1-123456"]
}]
```

Assignments collection
```
[{
    "id": 10309,
    "class": 123456,
    "name": "HW 1",
    "type": "homework"
},
{
    "id": 10310,
    "class": 123456,
    "name": "Project 1",
    "type": "project",
    "members": [
        "user@example.com",
        "user2@example.com"
    ],
    "rubric": [
        {
            "category": "unboosted-ness",
            "maximum-score": 10,
```

```
        "score": 1
      }
    ]
}]
```

Submissions collection
```
[{
    "id": "sub-hw1",
    "class": 123456,
    "assignment-id": 10309,
    "type": "file",
    "submission": "/path/to/file"
},
{
    "id": "sub-p1",
    "class": 123456,
    "assignment-id": 10310,
    "type": "text",
    "submission": "https://github.com/anyakeller/rocket-sammies"
}]
```

Component Map

- Templates:
    - login.html
    - dashboard.html
    - gradebook.html
    - input.html
    - class.html
    - assignment.html
    - project.html
- Flask:
    - app.py: Runs the flask app
    - Utils:
        - security.py: Handles creation of new accounts and the validation of login credentials
        - notifications.py: Routinely checks for any notifications to send based on changes to database
        - export.py: Creates various different spreadsheets based off of grades, students, groups, assignments etc. Can also export to a separate file of the user's choosing.
        - grading.py: Uses weighing values in database to assign grades to a project easily and in a customizable manner

- - - ■ graphs.py: Using D3 or some other graphic library, will create graphs based on grades to help analysis and provide useful visual information for the user
      - ■ input.py: Can be used for manually inputting grades into database for assignments other than projects
    - ○ Data:
      - ■ mongo.py: Interacts with mongoDB to retrieve information for other files
        - ● Keeps data on accounts, students, classes, assignments, submissions, and dates
- ● Bootstrap mumbo-jumbo

Site Map

- - Login page
- - Dashboard
    - - overview of courses
    - - notifications, e.g: "x, y and z submitted w"
- - Gradebook
    - - View grades in a spreadsheet-like format, by student (all his/her assignments), or by assignment (all students), either from one class or all classes
    - - An export to spreadsheet feature
    - - Give grades on assignments projects
    - - *Extra functionality:* draw graphs and make comparisons between classes, forms on tests, etc.
- - Class view
    - - list and/or calendar of upcoming assignments
    - - roster of students in the class
- - Assignment view
    - - list of groups/individuals working on this assignment
    - - the rubric
    - - upcoming deadlines
- - Project viewer -- see aspects of a given student's or group's project