EzExam
Online Examination Application

Team GPS
Jennifer Gamboa, Rohan Patel, Twisha Patel, Aye Swe
San Jose State University
CMPE/SE 131
May 10, 2017
What is EzExam?

Integrated online examination system that:

- Reduces paperwork
- Efficient, convenient and less stressful
- Time saver
- Assess students by conducting online objective exams
- Allow professors to create exams easily
- Can help both professors and students improve their examination experience
Product Objective

EzExam was designed to change the conventional process of conducting and taking a test.

Designed to facilitate user and administrator through a fully automatic system.
Live Web Demo:

http://localhost:3000/
EZ Exam Project UML Class Diagram

**Exam**
- `ExamID : int`
- `AnswerID : int`
- `ProfessorID : int`
  - `setExamID(examID : int) : void`
  - `setAnswerID(answerID : int) : void`
  - `setProfessorID(professorID : int) : void`
  - `getExamID() : int`
  - `getAnswerID() : int`
  - `getProfessorID() : int`

**Question**
- `Content : String`
- `Answer : String`
- `Marks : int`
- `Created_at : int`
- `Updated_at : int`
- `Exam_id : int`
  - `addQuestion(content : String) : void`

**Professor**
- `Name : String`
- `AnswerID : int`
- `ExamID : int`
  - `setProfessorName(name : String) : void`
  - `setAnswerID(AnswerID : int) : void`
  - `setExamID(ExamID : int) : void`
  - `getProfessorName() : String`
  - `getAnswerID() : int`
  - `getExamID() : int`

**Student**
- `Name : String`
- `examID : int`
- `AnswerID : int`
- `ProfessorID : int`
  - `setStudent() : void`
  - `setName(name : String) : void`
  - `setExamID(examID : int) : void`
  - `setAnswerID(answerID : int) : void`
  - `setProfessorID(professorID : int) : void`
  - `getStudentID() : String`
  - `getName() : String`
  - `getAnswerID() : int`
  - `getExamID() : int`

**Result**
- `resultID : int`
- `examID : int`
- `user_id : int`
- `score : int`
- `max_score : int`
- `timestmaps : int`
  - `setExamID(examID : int) : void`
  - `getResult_params(examID : int, userID : int, score : int, max : int) : void`
EzExam project UML sequence Diagram
EzExam Project Entity-Relationship (ER) Diagram
Relational Schema Diagram

- **Students**
  - StudentID (PK)
  - studentName
  - ExamID (FK)
  - password
  - QuestionID (PK) (0|FK)

- **Questions**
  - QuestionID (PK)
  - ExamID (FK)
  - Marks
  - QuestionContent
  - Options
  - Time

- **Professors**
  - ProfessorID (PK)
  - Name
  - ExamID (PK) (FK)
  - QuestionID (PK) (FK)

- **Results**
  - ExamID (PK)
  - StudentID (FK)
  - score
  - max_score
  - StudentID (PK) (FK)

- **TakeExam**
  - QuestionID (FK)
  - StudentID (PK) (FK)

- **Exams**
  - QuestionID
  - ProfessorID (FK)
  - StudentID (FK)
  - ExamID (PK) (U)
  - ExamName
  - Hours
  - minute
  - ProfessorID (PK) (FK)
EzExam Project Gantt Chart with work break down units
Exams

<table>
<thead>
<tr>
<th>Exam</th>
<th>Take Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPE 131 - Final Exam</td>
<td></td>
</tr>
</tbody>
</table>
Sign up

* Email
  teacher@sjsu.edu

* Password
  ••••
  8 characters minimum

* Password confirmation
  ••••

Sign up
Log in
Sign up

Please review the problems below:

* Email
  cmpe131@sjsu.edu

* Password
  
  is too short (minimum is 8 characters)
  8 characters minimum

* Password confirmation
  
Sign up
Log in
Image 4: Log in

Exams

Exam
CMPE 131 - Final Exam

Log in

Email
student@sjsu.edu

Password
******|

Remember me
Log in

Close

Copyright ©SJSU
Help/FAQ?

How do I take the exam?
Search for your exam name and click on "Take exam".

How do I create an exam?
Only the professor can create an exam by logging in the professor's account.

Will there be a downloadable answer key for all the exams?
No, you will not be able to download an answer key for any exam.

Why can't I take the exam?
If you have not signed in then you can not take an exam.
## Exams

<table>
<thead>
<tr>
<th>Exam</th>
<th>Take Exam</th>
<th>Result</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPE 131 - Final Exam</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
New exam

Name

Exam

Create Exam

Back
# Questions

<table>
<thead>
<tr>
<th>Content</th>
<th>Answer</th>
<th>Marks</th>
</tr>
</thead>
</table>

[New Question] [Edit] [Back]
New question

Question

Answer

Marks

Options

Add an option

Create Question

Back
Editing question

**Question**
What does MVC stand for?

**Answer**
Model-View-Controller

**Marks**
1

**Options**
- Model-View-Controller
- Model View Controller Architecture
- Model Architecture
- None

**Buttons**
- Update Question
- Add an option
<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Student</th>
<th>Marks Obtained</th>
<th>Result</th>
</tr>
</thead>
<tbody>
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<td>5</td>
<td>Pass</td>
</tr>
<tr>
<td>2</td>
<td><a href="mailto:12@12.com">12@12.com</a></td>
<td>5</td>
<td>Pass</td>
</tr>
<tr>
<td>3</td>
<td><a href="mailto:12@12.com">12@12.com</a></td>
<td>5</td>
<td>Pass</td>
</tr>
<tr>
<td>4</td>
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<td>5</td>
<td>Pass</td>
</tr>
<tr>
<td>5</td>
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<td>5</td>
<td>Pass</td>
</tr>
<tr>
<td>6</td>
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</tr>
<tr>
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<td>Pass</td>
</tr>
<tr>
<td>8</td>
<td><a href="mailto:12@12.com">12@12.com</a></td>
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</tr>
<tr>
<td>9</td>
<td><a href="mailto:12@12.com">12@12.com</a></td>
<td>4</td>
<td>Pass</td>
</tr>
<tr>
<td>Sr. No.</td>
<td>Result</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
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<tr>
<td>1</td>
<td>Pass</td>
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<td>2</td>
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<td>Pass</td>
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<td></td>
</tr>
<tr>
<td>9</td>
<td>Pass</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Image 14: Delete an exam

#### 0.0.0.0:3000 says:

Are you sure?

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CMPE 131 - Final Exam

Question: What command helps to start the rails server?

- rails
- rails s
- $rails s
- None

Answer
Result

You got 5 correct out of 5.

Maximum Possible Score : 5

Score : 5

Done