CSCE 606: Software Engineering Project

Title: CSE PhD Qual Practice System

Team: WeCode

Iteration 3 Report

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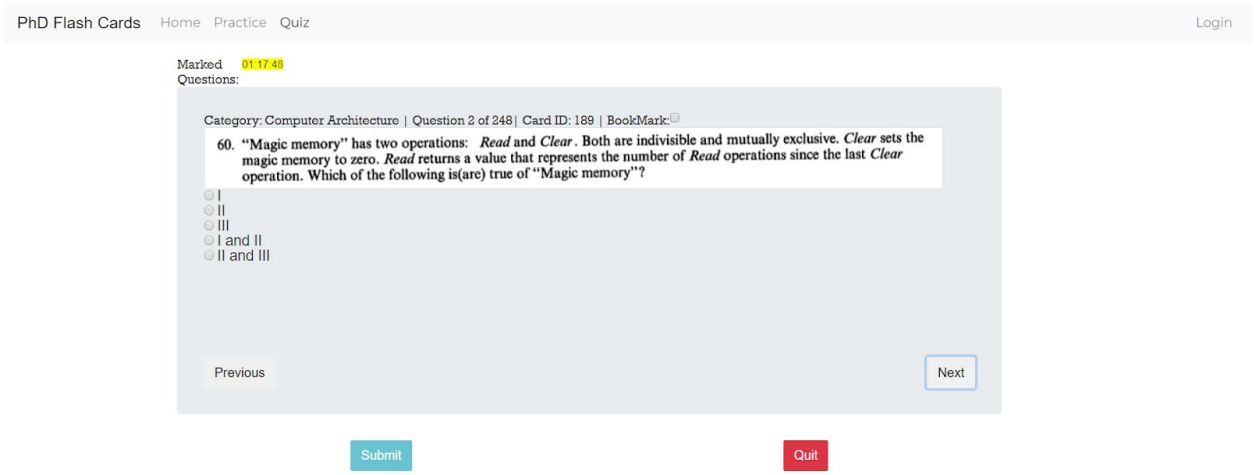
1. User stories implemented in this iteration:

- Quit Session
- Email Verification at Registration

Quit Session:
Description:
This Feature allows the user to quit the practice session or quiz in between. To develop this functionality we have added a Quit button for both the Quiz and Practice session which when clicked redirects the user to the Select Quiz Page in case of Quiz session and to Select Category in case of Practice Session. The functionality works based on the onClick function which calls a javascript method which does the redirection. In case of the Quiz Session the user is prompted once but not in the case of a Practice session.


PhD Flash Cards
Home
Practice
Quiz
Login
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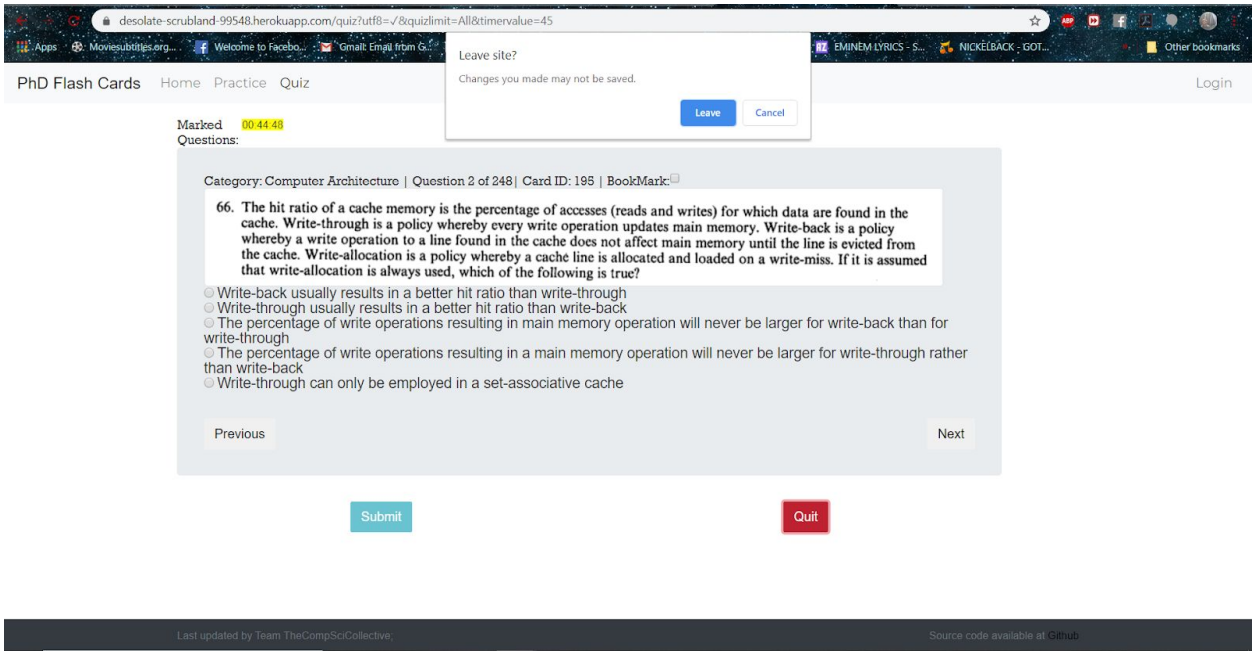
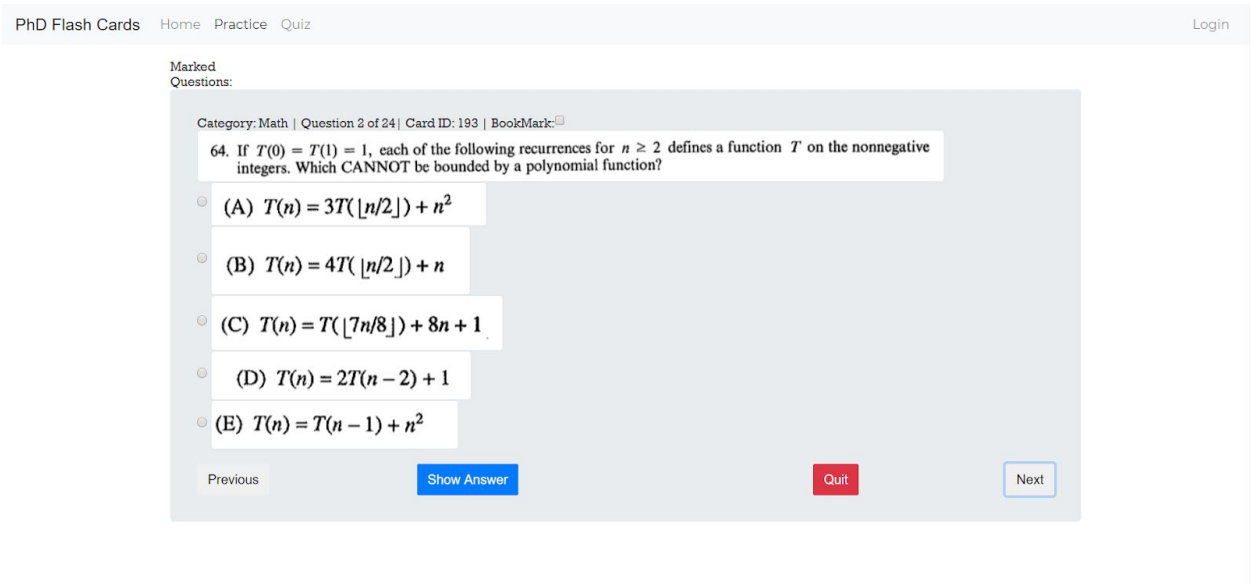
01:17:48
Questions:
Category: Computer Architecture | Question 2 of 248| Card ID: 189 | BookMark:
60. "Magic memory" has two operations: Read and Clear. Both are indivisible and mutually exclusive. Clear sets the magic memory to zero. Read returns a value that represents the number of Read operations since the last Clear operation. Which of the following is(are) true of "Magic memory"?
I
II
III
I and II
II and III
Previous
Next
Submit
Quit
Last updated by Team TheCompSciCollective;
Source code available at Github


desolate-scrubland-99548.herokuapp.com/quiz?utf8=✓&quizlimit=All&timervalue=45
Apps
Moviesubtitles.org...
Welcome to Facebo...
Gmail: Email from G...
EMINEM LYRICS - S...
NICKELBACK - GOT...
Other bookmarks
Leave site?
Changes you made may not be saved.
Leave
Cancel
PhD Flash Cards
Home
Practice
Quiz
Login
Marked
00:44:48
Questions:
Category: Computer Architecture | Question 2 of 248| Card ID: 195 | BookMark:
66. The hit ratio of a cache memory is the percentage of accesses (reads and writes) for which data are found in the cache. Write-through is a policy whereby every write operation updates main memory. Write-back is a policy whereby a write operation to a line found in the cache does not affect main memory until the line is evicted from the cache. Write-allocation is a policy whereby a cache line is allocated and loaded on a write-miss. If it is assumed that write-allocation is always used, which of the following is true?
Write-back usually results in a better hit ratio than write-through
Write-through usually results in a better hit ratio than write-back
The percentage of write operations resulting in main memory operation will never be larger for write-back than for write-through
The percentage of write operations resulting in a main memory operation will never be larger for write-through rather than write-back
Write-through can only be employed in a set-associative cache
Previous
Next
Submit
Quit
Last updated by Team TheCompSciCollective;
Source code available at Github



Email Verification at Registration:

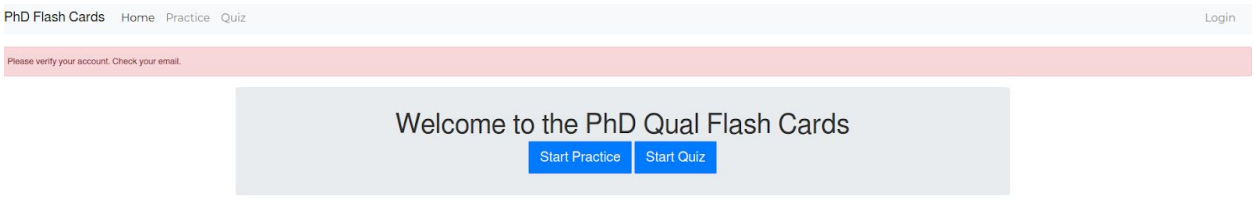
Description:

We are able to add email verification on user registration. The functionality works as below. On user register, we send email to respective addresses with a verification link. Any user login before the verification is denied with the proper error message.

In case the verification email link expires, on clicking the same, we redirect to the page to request it again. Please find the screenshots below.

Apart from the controller modification, we have to make changes in the model to accommodate the feature. We created a new migration with confirmation_toke, confirmed_at, confirmation_send time. This feature highly relies on the external library, devise gem. There were breaking changes in the current login flow. We increased code coverage to capture any regression.

Email



2. Testing achieved

Quit Session:

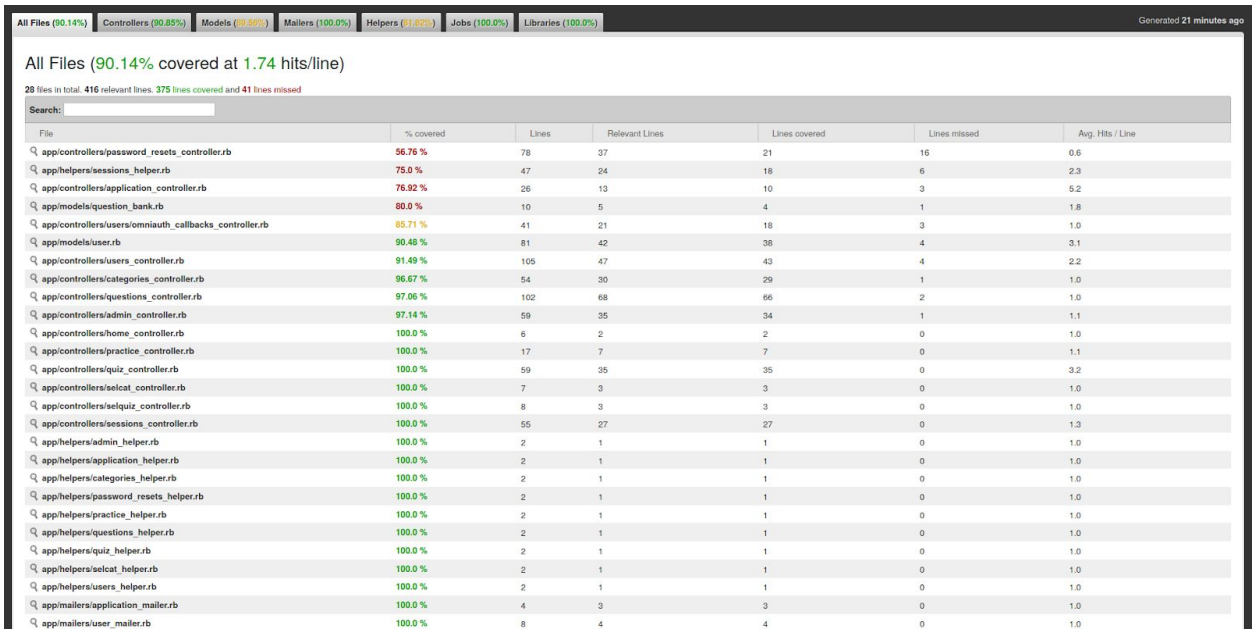
1) Tested after login into the Application using a valid user and then tried to start a quiz and then clicked on the Quit Button to see if the user was prompted first and on confirmation redirected to the Select Quiz Page.
2) Tested after login into the Application using a valid user and then tried to start practice session and then clicked on the Quit Button to see if the user was redirected to the Select Category Page.
3) Navigated from the Home Page to Start Quiz and Start Practice Page and checked Feature 1) and 2) after starting the quiz or practice.

Email Verification at Registration:

1) Tested the registration of the user with an valid email address and checked if an email was sent to the valid email address.
2) On clicking the confirmation email whether the user was persisted in the database and is able to login into the application with the privilege he registered with and also checked different privileges like admin and normal user.
3) Checked if the confirmation link received in the email is not clicked then the user is not persisted in the database.
4) After the successful registration whether the user was able to login with Log with Google and Facebook Feature.

Corresponding Rspec and Cucumber tests where written for the above features and you can see the coverage report below.

We improved the code coverage from 40 to 90%.



All Files (90.14%) | Controllers (90.85%) | Models (80.56%) | Mailers (100.0%) | Helpers (91.82%) | Jobs (100.0%) | Libraries (100.0%) | Generated 21 minutes ago

All Files (90.14% covered at 1.74 hits/line)

28 files in total. 416 relevant lines. 375 lines covered and 41 lines missed

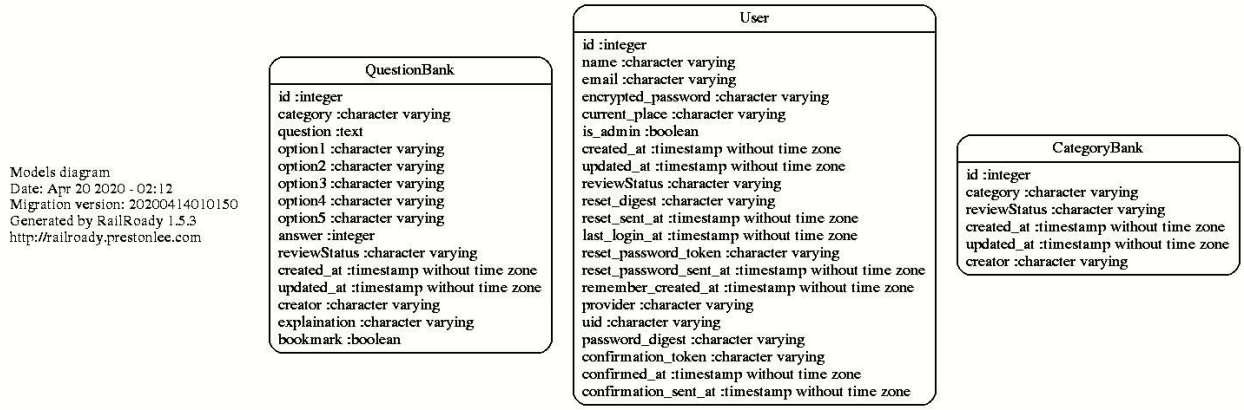
Search:

File	% covered	Lines	Relevant Lines	Lines covered	Lines missed	Avg. Hits / Line
app/controllers/password_resets_controller.rb	56.76 %	78	37	21	16	0.6
app/helpers/sessions_helper.rb	75.0 %	47	24	18	6	2.3
app/controllers/application_controller.rb	76.92 %	26	13	10	3	5.2
app/models/question_bank.rb	80.0 %	10	5	4	1	1.8
app/controllers/users/omniauth_callbacks_controller.rb	85.71 %	41	21	18	3	1.0
app/models/user.rb	90.48 %	81	42	38	4	3.1
app/controllers/users_controller.rb	91.49 %	105	47	43	4	2.2
app/controllers/categories_controller.rb	96.67 %	54	30	29	1	1.0
app/controllers/questions_controller.rb	97.06 %	102	68	66	2	1.0
app/controllers/admin_controller.rb	97.14 %	59	35	34	1	1.1
app/controllers/home_controller.rb	100.0 %	6	2	2	0	1.0
app/controllers/practice_controller.rb	100.0 %	17	7	7	0	1.1
app/controllers/quiz_controller.rb	100.0 %	59	35	35	0	3.2
app/controllers/selcat_controller.rb	100.0 %	7	3	3	0	1.0
app/controllers/selquiz_controller.rb	100.0 %	8	3	3	0	1.0
app/controllers/sessions_controller.rb	100.0 %	55	27	27	0	1.3
app/helpers/admin_helper.rb	100.0 %	2	1	1	0	1.0
app/helpers/application_helper.rb	100.0 %	2	1	1	0	1.0
app/helpers/categories_helper.rb	100.0 %	2	1	1	0	1.0
app/helpers/password_resets_helper.rb	100.0 %	2	1	1	0	1.0
app/helpers/practice_helper.rb	100.0 %	2	1	1	0	1.0
app/helpers/questions_helper.rb	100.0 %	2	1	1	0	1.0
app/helpers/quiz_helper.rb	100.0 %	2	1	1	0	1.0
app/helpers/selcat_helper.rb	100.0 %	2	1	1	0	1.0
app/helpers/users_helper.rb	100.0 %	2	1	1	0	1.0
app/mailers/application_mailer.rb	100.0 %	4	3	3	0	1.0
app/mailers/user_mailer.rb	100.0 %	8	4	4	0	1.0

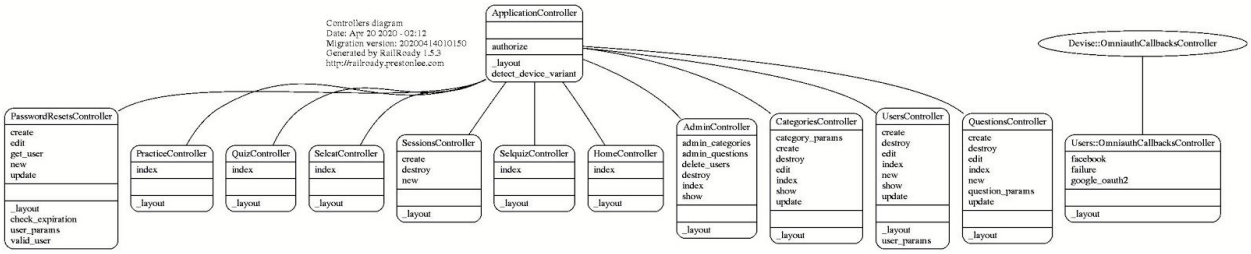
3. UML Diagram:

This section contains uml diagram after the changes.

Model



Controller



5. Customer Meeting:

The team had previously met with Dr. Duncan Walker on April 2nd and discussed the user stories in detail for the further iterations. The customer was satisfied with the implementation and had suggested Quit Session and Email Verification for Registration user stories.

Pivotal Tracker: https://www.pivotaltracker.com/n/projects/2441195
Github Link: https://github.com/Shruthi-Sampathkumar/PhD-Qual-Practice
Heroku Link: https://desolate-scrubland-99548.herokuapp.com/home