

Software testing

Mandatory assignment

Multiple choice schema with scoring

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Minimal functional requirements

- Admin can add and delete questions
- Admin can edit an already existing question
- Student is required to have a minimum of 80% score to pass
- A question must have at least 3 answer where only one answer is the correct
- Each correct answer gives the corresponding to the question points
- A failed answer would be 0 points
- When submitted the score is shown out of highest score possible, alongside with a percentage overview

Future development

- Admin can specify different points to each question
- Admin can add multiple choice questions
- Admin can create students and view results from all participants

Use cases

Admin use cases

Basic flow: - Admin navigates to the login page

- Admin selects his role on the login page, where he has 2 options - Admin and Student

- Admin fills in email and password in the corresponding fields

- Admin clicks on the Submit button

Success scenario : Admin is logged in

"As an Admin, I want to log in to the Admin page"

Acceptance criteria: Admin is able to log in

Preconditions: Admin has access to the application

"As an Admin, I want to add a question"

Acceptance criteria: Admin is able to add a question

Preconditions: Admin is logged in

Basic flow: - Admin clicks on the 'Add question' button

- Admin is redirected to a new page with input fields for the new question
- Admin fills in the "Question" input field, where the question should be stated
- Admin fills in at least 3 "Answer" input fields, where only one choice is the correct one

- Admin clicks on the "Save" button

Alternate flow: - If Admin fills in less than 3 "Answer" input fields, Admin gets an error message "You can't have less than 3 answer options!"

- If Admins leaves a question without an answer, Admin gets an error message "You have to specify a correct answer!"

Success scenario : Admin's new question is saved and added to the questionnaire

"As an Admin, I want to be able to update a question in order to change the choices or change the given answer"

Acceptance criteria: Admin is able to edit an existing question

Preconditions: Admin is logged in

Basic flow: - Admin has a list of all existing questions on Admin page

- Next to each question there is an "Edit" button that the Admin can click
- Admin clicks on the Edit button and is redirected to the "Add question"

page, where the input fields for the question are filled in correspondingly

- There the Admin modifies the way the question has been written and adds, removes, marks as correct or edits the given answers

- Admin clicks on the "Save" button
- Admin gets a pop-up field with new "Update" button, notifying the Admin that changes has been made
- Admin clicks on the 'Update' button

Alternate flow: - If Admin deletes an answer, and leaves less than 3 to be updated, Admin gets an error message “You can’t have less than 3 answer options!”

- If Admins leaves a question without an answer, Admin gets an error message “You have to specify a correct answer!”

Success scenario: All changes are saved and updated

”As an Admin, I want to be able to delete a question”

Acceptance criteria: Admin is able to delete a question

Preconditions: Admin is logged in

Basic flow: - On the “Edit question” page, Admin also has a ‘Delete’ button

- Admin clicks on the ‘Delete’ and gets a pop up field stating “Are you sure you want to delete this question?” with a new “Confirm” button

- Admin clicks on ‘Confirm’ button

Success scenario: The selected question is removed from the questionnaire

Student use cases

”As a student, I want to be able to log in to access the questionnaire”

Acceptance criteria: Student is able to log in

Preconditions: Student has access to the application

Basic flow: - Student navigates to the login page

- Student selects his role on the login page, where he has 2 options - Admin and Student

- Student fills in email and password in the corresponding fields

- Student clicks on the Submit button

Success scenario : Student is logged in

”As a Student, I want to answer the questionnaire”

Acceptance criteria: Student is able to answer the questionnaire

Preconditions: Student is logged in

Basic flow: - On Student page, Student click on the “Go!” Button

- Student is redirected to the questionnaire

- Students answers all of the questions

Success scenario : All questions are answered by the Student

"As a student, I want to submit the answers of my questionnaire and get my results"

Acceptance criteria: Student is able to submit the answered questionnaire

Preconditions: Student has answered all questions in the questionnaire

Basic flow:

- Student clicks on "Submit" button
- Student gets a pop up with a new "Get result" button
- Student clicks on 'Get result' button

Success scenario: Student gets the number of correct answers clicked out of all answers, as well as a percentage representation of the result

"As a student, I want to see all the questions with their correct answers after I finish the questionnaire"

Acceptance criteria: Student is able to see the correct answers after the questionnaire is answered

Preconditions: Student has received the results from the questionnaire

Basic flow: - On Get results page, underneath the result, Student can see the questionnaire again, where the correct answers are marked with green colour

Success scenario: Student has access to the correct answers to the questionnaire

System use cases

Minimum of 80% score to pass

Acceptance criteria: System requires at least 80% of all questions to be answered correctly in order to pass

Preconditions: Student has answered all questions in the questionnaire

Basic flow: - On "Get result" page, if the percentage overview is less than 80%, include a message in red letters "You shall not pass! Try again!"

- If the result is above 80%, display a message in green letters "Congratulations!"

Create an evaluation system

Acceptance criteria: Give points to Student for each correctly answered question

Preconditions: Student has answered all questions in the questionnaire

Basic flow: - If Student answers a question correctly, add the corresponding points to his result

- If Student gives a wrong answer to a question, no points are added to the result

Use cases for future development

"As an Admin, I want to set points for each question"

Acceptance criteria: Admin is able to set 1,2 or 3 points for each question, based on difficulty level

Preconditions: Admin is logged in

Basic flow: - On "Add question" page next to each question Admin can click on a drop down menu with 3 options - 1,2 and 3

- Each choice is corresponding to the points for each question

- Admin clicks on the 'Save button'

Success scenario: Admin has successfully set points for each question

"As an Admin, I want to add multiple choice questions"

Acceptance criteria: Admin is able to create questions that have more than one correct answer

Preconditions: Admin is logged in

Basic flow: - On the "Add question" page Admin clicks on a radio button on top of the page with 2 options: "one answer" and "multiple answers"

- If Admin selects "Multiple answers", Admin has the option to set more than one answer as correct

- Admin clicks on the 'Save' button

Success scenario: Program automatically updates the title of the questions with multiple answers, adding a message in braces stating "This question has more than one correct answers!" Admin has successfully made a question with multiple answers

"As an Admin, I want to create new Students"

Acceptance criteria: Admin is able to create new Students

Preconditions: Admin is logged in

Basic flow:

- On Admin, Admin clicks on the "Add new student" button
- Admin is redirected to a new page "New student"
- On New student page Admin fills in 4 input fields -for Full name, Username, Password, Student email
- Admin clicks on the "Save" button

Success scenario: Admin has successfully created a new student

"As an Admin I want to save the results of all students for future references"

Acceptance criteria: Admin is able to see the results of all Students

Preconditions: Admin is logged in and at least one Student has completed the questionnaire

Basic flow:

- On Admin page Admin can click on the "Student results" button
- Admin is redirected to the Student result page, where Admin has a list of all students that participated in the questionnaire alongside with their results displayed

Success scenario: Admin can view the results of all participants