

QUIZ PRACTICING SYSTEM

Project Assignment Requirement

– Hanoi, May 2021 –

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I. Introduction

This project is aimed at developing an quiz practice system which supports for the organization/expert to build up & sell the quiz practice services, supports the user to search-register-and-access online subjects for practicing. This system supports below types of users

- Guest: unregistered users
- Customer: they are registered users who are actual customers or potential customers
- Marketing: the marketing members of the organization
- Sale: the sale members of the organization
- Expert: access & prepare the course/test contents as assigned by admin
- Admin: the organization leader/manager, acts as the system administrator

II. Functional Requirements

1. Overall Description

The to-be-developed system includes the 8 features with the functions for each feature are listed in the beneath sections. The details for each function in those features are as listed in the attached Excel file (**Quiz Practice_Function Details.xlsx**)

2. Common Feature

The common functions/screens used for all types of users, as listed below

- User Login: authenticate the user to give him/her to access authorized features later on
- User Register: register new user into the system, verified by the registered email
- Reset Password: use in case the user forgot his/her password
- User Authorization: authorize user into the system functions based on his/her role
- User Profile: view & edit/update user profile
- Change Password: change user's login password

3. Public Feature

This feature includes the screens used for the Guests, as listed below

- Home Page: the starting page of the system
- Blogs List: list of shared posts
- Blog Details: detail of the shared post
- Subject List: list of the active subjects
- Subject Details: details of the selected subject
- Subject Register: allow the user to register to access a subject with a specific price package

4. Customer Feature

This includes the screens used for the system customers, as listed below

a. My Registrations

This page is for the customer to view his/her submitted course registrations

b. Practices List

This page allows the user to view the user's list of quiz practices that s/he has taken. The screen layout is as below, in which the user can:

- Click the New Practice button to go to the Practice Details page
- Click View Details to go to the Practice Details page
- Click Simulation Exam to got to the Simulation Exam page

Practices List

<<Subject name>>	10/09/2019	xx Correct	50%	View Details
<<Exam name>>	Date taken	yy Questions	Correct	
<<Test type: Put the test name here>> Duration - hh:mm:ss				
<<Subject name>>	10/09/2019	xx Correct	50%	View Details
Focused Test	Date taken	yy Questions	Correct	
<<Keyword/Lesson: Keywords/Lesson/Domain>> Duration - hh:mm:ss				
<<Subject name>>	10/09/2019	xx Correct	50%	View Details
Focused Test	Date taken	yy Questions	Correct	
<<Keyword/Lesson: Keywords/Lesson/Domain>> Duration - hh:mm:ss				
<<Subject name>>	10/09/2019	xx Correct	50%	View Details
<<Exam name>>	Date taken	yy Questions	Correct	
<<Test type: Put the test name here>> Duration - hh:mm:ss				
<<Subject name>>	10/09/2019	xx Correct	50%	View Details
<<Exam name>>	Date taken	yy Questions	Correct	
<<Test type: Put the test name here>> Duration - hh:mm:ss				

c. Practice Details

This page allows the user to input new practice information for practicing or to view his/her existing one. The screen layout is as below

Practice Details

Subject

Number of practicing questions

Questions are selected by topic(s) or a specific dimension?

Question group (choose one or all topic/dimension(s))

When creating new practice, the user can only choose the subjects that s/he has the access. Click Practice button, user would be redirected to the Quiz Handle page.

In case the user has come to the page by viewing it, the information on the page is read-only, and the button Practice is now Practice Review, from that the user can click to go to the Quiz Review page.

d. Simulation Exam

This page allows the user to view the existing exams of the subject that s/he has the access.

- List columns: id, subject, simulation exam, level, #question, duration, and pass rate
- The user can filter the list by the subject + search list items by the exam name

From the list, the user can choose to take the exam to see the exam details, and then to go to Quiz Handle page to practice that relevant simulation exam.

e. Quiz Handle

This screen allows the user to browse and answer the quiz questions. The screen layout is as below

📍 1 / 20
⌚ 00:10:34

1)
Question ID: 643

The quality efforts on the project have gone through some changes during the first four months of project work. Two processes in particular have undergone extensive change. The customer is happy with the work to date, but has heard that the competition is working on a similar product. The team has been asked to analyze and create options for the customer. Value analysis is performed to get:

- ☐ A. Management to buy into the project
- ☐ B. The team to buy into the project
- ☐ C. A less costly way of doing the same work
- ☐ D. More value from the cost analysis

Peek at Answer
Mark for Review

Review Progress
Next

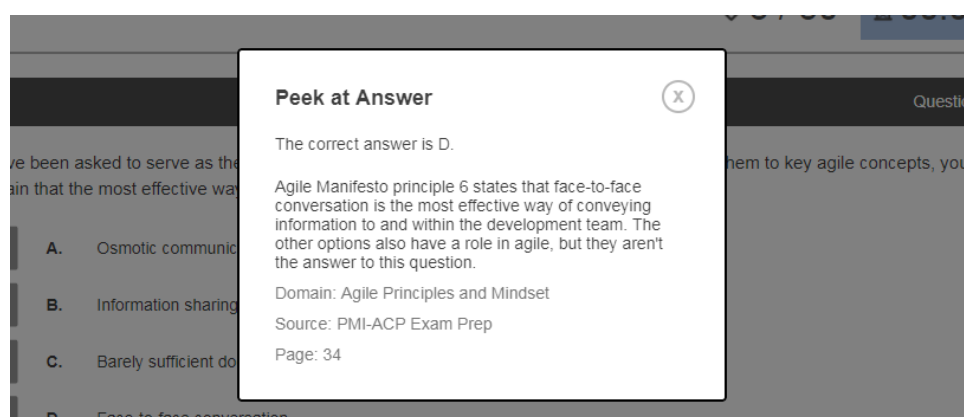
Notes about the buttons in the right side of the footer:

- First question: have Next button only
- Last question: have Previous & Score Exam buttons
- Middle question: have Previous & Next buttons

Other notes:

- The timer is counting down for simulation exam and counting up for practicing quiz
- The button Peek at Answer only available for the practicing quiz, not for simulation exam
- During quiz-taking progress, if the user chooses to refresh the page, there is no impact

The pop-up screen below would be shown if the user clicks the Peek at Answer button



When the user clicks the Review Progress button, the below pop-up screen would be shown with 4 options UnAnswered, Marked, Answered, and All Questions with which, the user can filter relevant question numbers to show. By clicking on each question number, the user is redirected back to the Quiz Handle screen and at the chosen question.

Review Progress

Review before scoring exam.

UNANSWERED

MARKED

ANSWERED

ALL QUESTIONS

SCORE EXAM NOW

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88
89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120												

If the user chooses to Score Exam (at the last question in the Quiz Handle screen or to Score Exam Now in the above pop-up screen), the confirmation pop-up would be shown as below

- If there is not any answered question, allow the user to continue the testing or coming back to the Quiz Lesson page (SubForm1 ~ Quiz Description)

Exit Exam?

You have not answered any questions. By clicking on the [Exit Exam] button below, you will complete your current exam and be returned to the dashboard.

← Back

Exit Exam

- If there are some unanswered questions, allow the user to continue the testing or to quiz the quiz & coming to the Quiz Lesson page (SubForm2 ~ Quiz Result)

Score Exam?

17 of 20 Questions Answered

By clicking on the [Score Exam] button below, you will complete your current exam and receive your score. You will not be able to change any answers after this point.

← Back

Score Exam

- If all the questions are answered, allow the user to continue testing or to submit the testing and coming to the Quiz Lesson page (SubForm2 ~ Quiz Result).

Score Exam?

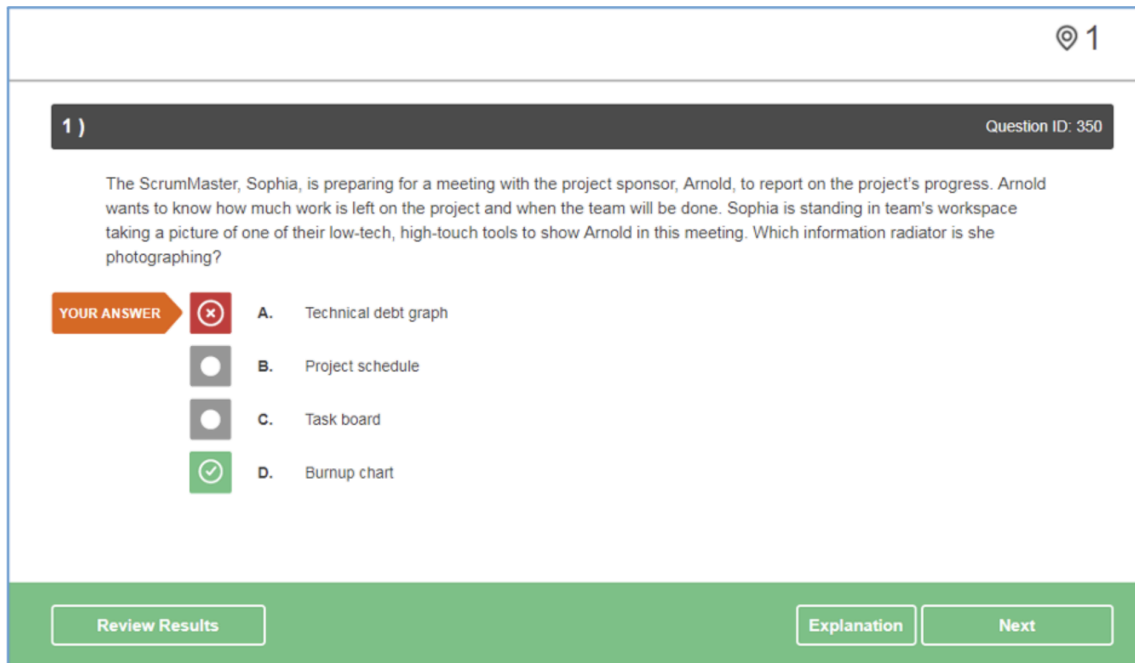
By clicking on the [Score Exam] button below, you will complete your current exam and receive your score. You will not be able to change any answers after this point.

← Back

Score Exam

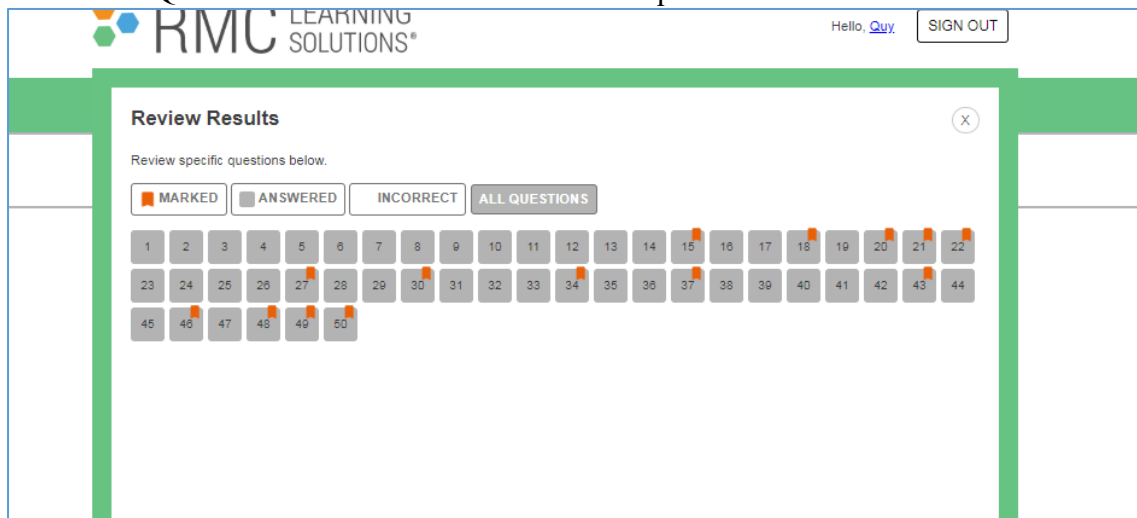
f. Quiz Review

This screen allows the user to review the details of the quiz that s/he has just taken. The screen layout is as below

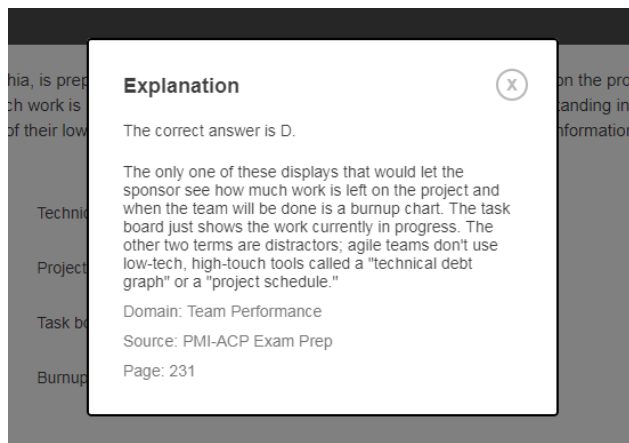


The Explanation button is available only when the question is attached with un-empty explanation

When the user clicks the Review Result button, the below pop-up screen would be shown with 4 options Marked, Answered, Incorrect, and All Questions with which, the user can filter relevant question numbers to show. By clicking on each question number, the user is redirected back to the Quiz Review screen and at the chosen question.



When the user clicks the Explanation button of the Question Review screen



5. Marketing Feature

This includes the screens used for marketing members, as listed below

- Dashboard: This is for the Admin, Sale or Marketing to see and lookup for the relevant management statistics in the system, with the relevant links to the related screens.
- Posts List: list, filter, search, show, hide, view, add new or edit existing post(s)
- Post Details: view & edit the details of a specific post
- Sliders List: list, filter, search, show, hide, view, add new or edit existing slider(s)
- Slider Details: view & edit the details of a specific slider

6. Course Content

This feature includes the functions that allow the admin to add, edit the subject contents and assign the expert to the subject for preparing the subject contents;

a. Subjects List

This screen allows the admin and expert to see the existing course list. The admin can see all the courses while the expert can only see his assigned courses

b. New Subject

This screen allows the admin to add new course and assign the expert (owner) for further course content preparation

c. Subject Details

This page allows the admin and the assigned expert to access and prepare the subject information, including the course general information, the dimension, and price package. Only the admin can change the status to Published or Unpublished + add/edit the price packages.

The screen layouts are as below (for 3 tabs of the screen). With the admin, the Overview tab also displays the owner (expert) information, from that s/he can change the owner if needed.

Subject Details

Overview Dimension Price Package

Subject Name

Text box

Category

Combo Box

☐ Featured Subject

Status

Status

Description

Subject Description

Submit

Back

Subject Details

Dimension **Overview** Price Package

[Add New](#)

#	Type	Dimension	Action
1	Domain	Business	Edit Delete
3	Domain	Process	Edit Delete
4	Domain	People	Edit Delete
2	Group	Initiating	Edit Delete
5	Group	Planning	Edit Delete
6	Group	Executing	Edit Delete

Subject Details

Price Package **Overview** Dimension

[Add New](#)

#	Package	Duration	List Price	Sale Price	Status	Action
1	Gói truy cập 3 tháng	3	3600	3200	Active	Edit Deactivate
2	Gói truy cập 6 tháng	6	5000	4500	Inactive	Edit Activate
4	Gói truy cập vô thời hạn		10000	9800	Active	Edit Deactivate

d. Subject Dimension

This page allows the admin/expert to input or edit subject dimension information, including the following detailed information: type, name, description

e. Price Package

This page allows the admin to input or edit subject dimension information, including the following detailed information: name, access duration (in months), status (read-only), list price, sale price, description. The expert can only view the information.

f. Subject Lessons

This page shows the list of lessons for a selected package. On this page, the admin/expert is allowed to activate/deactivate, or call the Lesson Details for adding new or editing existing lesson. The screen layout is as below

Subject Lessons
Subject name: <<Name of Subject>>

All lesson groups ▾ All statuses ▾ Type lesson name to search 🔍 [Add Lesson](#)

ID	Lesson	Order	Type	Status	Action
1	Chương một	1	Subject Topic	Active	Edit Inactivate
5	-- Chương một chấm một	1	Lesson	Active	Edit Inactivate
7	-- Chương một chấm hai	2	Quiz	Inactive	Edit Activate
7	Chương hai	2	Subject Topic	Active	Edit Inactivate
7	Chương ba	3	Subject Topic	Active	Edit Inactivate

g. Lesson Details

This page allows the admin/expert to input/edit the lesson information, with below screen layout

Lesson Details

Name
Text box

Type
Subject Topic ▾

Topic
▾

Order
2

Video link
You Tube link

HTML Content
CKEditor Content

Submit

Back

The screen components are shown/hidden depending on the lesson type:

- Subject Topic: hide video link & HTML Content
- Lesson: with contents show as in the above screen
- Quiz: hide video link, show the Quiz dropdown list instead

7. Testing Content

This feature includes the functions that allow the admin and expert to prepare the testing-related contents (the questions bank & quizzes list)

a. Questions List

The existing questions list for a specific subject/course are shown here (paginatedly). On this screen, the admin/expert is allowed to filter the questions by the subject, lesson, dimension(s), level, status + search the questions by the content. The page also allows the user to import the question (redirect him/her to the Questions Import pop-up screen).

b. Questions Details

This page allows the admin/expert to input or edit questions information, including following information: subject, dimension(s), lesson, status, content, media (image, audio, video – with preview option), answer options (with the key marked + ability to add, edit, delete), and explanation

c. Questions Import

This is a pop-up screen which allows user to choose import file and then import the questions in the file into the questions bank. The screen also provides the option for the user to download the sample import template.

d. Quizzes List

The existing quizzes are shown in this page paginatedly:

- The user can filter the list by subject, quiz types + search quizzes by the name
- Each quiz includes following information: id, name, subject, level, # question, duration, pass rate, and the quiz type.

From this page, the user has the options to call to the Quiz Details page for adding new or editing existing quiz + delete the quiz. Please note that the quiz can be edited only when there is not any test taken yet.

e. Quiz Details

This page allows the user to input or edit quiz information. The screen layout is as below

The screenshot displays the 'Quiz Details' screen with two tabs: 'Overview' and 'Setting'. The 'Overview' tab is active, showing fields for Name (Exam 1), Subject (Subject name), Exam Level (Medium), Duration (minutes) (50), Pass Rate (%) (50%), Quiz Type (Simulation), and Description (Text box). The 'Setting' tab is also visible, showing fields for Tổng số câu hỏi (50), Loại câu hỏi (Theo topic, Theo group, Theo domain), and three groups of questions (Tên nhóm lựa chọn 1, 2, 3) with associated 'Số câu' and 'Xoá' buttons. 'Save' and 'Back' buttons are at the bottom.

8. Sales Feature

This includes the screens used for sale persons

a. Registrations List

Show the list of users' registrations

- Each registration includes below information: id, email, registration time, subject, package, total cost, status, valid from, valid to, last updated by;
- The user can filter the list by subject (searchable), registration time (from, to), status + can search by the email
- The list can be sorted by id, email, registration time, subject, package, total cost, status, valid from, valid to
- From the list, the user can choose to add new or edit an existing registration via the Registration Details screen as below

b. Registration Details

Show detailed registration information (subject, package with list price/sale price, full name, gender, email, mobile), registration time, sale, status, valid from, valid to, notes) from that for the user to add new or change the status of a registration with relevant notes (if a registration is created by the user, then s/he can edit other registration information). On changing a registration status to Paid, if the user with relevant registered email does not exist, the system would create one and send back to the user the login information (link, email, pass) along with the other notification notes

9. Admin Feature

The Admin feature includes the screens used for the organization manager and system administrator, as listed below

- Users List: list, filter, search, show, hide, view, add new or edit existing user(s)
- User Details: view & edit the details of a specific user
- Settings List: list, filter, search, show, hide, view, add new or edit existing system setting(s)
- Setting Details: view & edit the details of a specific system setting

3. Other requirements

a. Configuring information

- All the user-configured data as listed below are defined and stored as the system setting(s)
 - 1: User Roles
 - 2: System Menu
 - 3: Post Categories
 - 4: Subject Categories
 - 5: Test Types (Simulation, Lesson-Quiz)
 - 6: Question Levels (Hard, Medium, Easy)
 - 7: Lesson Types (Subject Topic, Lesson, Quiz)
 - 8: Subject Dimension (Domain, Group)
- Those are managed via the Settings List & Setting Details as mentioned above (in the part 2.g)
- Other once-configured data are managed via the system config files (as mentions in the relevant functional details in the attached Excel file **QuizPractice_Function Details.xlsx**)

b. User Input data formats

The types & format (length, validation, etc) of the input data are suggested by the project team and need to mentioned clearly in the analysing & designing documents.

- Those must be agreed by the supervisor (teacher) before implementing.
- Once agreed, those must be implemented accordingly in the software input validating, data showing and in the system database.