Project Requirements IP CO-LAB

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Epic	
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QA	

Goals

Background and strategic fit

The project is aimed to provide a learning tutorial for the IP Co-Lab department. The application helps students better understand about Intellectual Property, Copyright and information related to patents.

The strategy employed towards the development of this application is to reuse the modules from Happy Being Us Application as a framework and add more specific features to the application.

Assumptions

Requirements

Two main entities interacting with the application: Admin, User.

1. ## Admin Module

Module id	Module name	Module description
1.1	Login	Authenticates the admin to the user
1.2	Manage Tutorial	Performs add/edit/remove operations on topic.
		Performs add/edit/remove operations on module.
		Performs add/edit/remove operations on activity.
1.3	Manage Diagnostic	Performs add/edit/remove operations on category.
		Performs add/edit/remove operations on diagnostic activity.
		Assign topic/s to diagnostic question.
		Performs add/edit/remove relations between diagnostic activities.
1.4	Manage Quiz	Performs add/edit/remove operations on quiz under a topic.
		Performs add/edit/remove operations on quiz activities under a quiz.
1.5	Manage Users	Lists all the users of the application.
		Review instances created under a user.

		Review topics' progress under an instance for a user.
		Review activities's/quiz's progress for a topic for a user.

2. **User Module**

Module id	Module name	Module description
2.1	Login/Register	Authenticates/Registers users to the application.
2.2	Edit User Details	
2.3	User Dashboard	
2.4	Start Tutorial	
2.5	Basic Tutorial	
2.6	Custom Tutorial	
2.7	Tutorial Instance	
2.8	Topic	
2.9	Module	
2.1	Quiz	
2.11	Activity	
2.12	Navigation	
2.13	Logout	

#	Title	User Story	Requirement	Importance

1	User Registration	A first time user visits the home page and clicks on the register tab	- The registration page must have required fields like first name, last name, email, user name, password.
			
			  ▪ the email entered must be unique within the application
			  ▪ the username entered must be unique
			  ▪ the password must be a minimum of 8 characters.
				• Must Have

2	User Login	A registered user visits the home page, the login page is shown	▪ The login page must have the fields user name, password. ▪ The the user enters wrong credentials, appropriate error message is shown ▪ On successful login, the user is redirected to user home page.	Must Have
3	Email Encryption	After registration the user details is stored in the database.	The user email must be encrypted before storing into the database.	
4	User Home	User lands on the home screen of the application	User should see a login/register window . User must also see links to various resources.	
5	User Diagnostic	User chooses to customize his tutorial	User answers diagnostic questions, Topics associated with each diagnostic question are added or not added based on the answer given by the user. If two diagnostic questions are related, then the user has to answer both of these questions correctly(as set by the admin) for the associated topics to be added to the user's instance.	
6	User Profile	Once the user registers, a profile is created for this new user	The user must be able to edit and update his user information.	

7	User Activity	User click on one of the available modules under a topic	The user must see the activities under this module. the user must be able to interact with this activity and go to next activity. The user must be able to navigate to different available activities within the module.	
8	User Quiz	When the user has completed all of the modules inside a topic, he will be able to take quiz	Quiz Question types: - Yes/No type - Multiple Question type - Image and a Yes/No together - Image and MCQ together User attempts the questions of the quiz one after another. In the end a score is calculated based on the correct answers given by the user. The correct answer to all these quiz questions under a topic is shown to the user at the end along with his score.	
9	Admin Login			
10	Admin Home			
11	Admin Topic			
12	Admin Activity			
13	Admin Diagnostic	Admin enters the diagnostic section to add-edit-update diagnostic questions.	The diagnostic questions are grouped under categories. - The admin must be able to add-edit a category. - The admin must be able to add-**edit** a simple diagnostic question. - A diagnostic question's answer is associated with topics, when user attempts this diagnostic question and answers it with the correct option, the associated topics are added to his profile. - When adding a diagnostic question the admin should be able to associate this question with one or more topics. - The application may have two or more diagnostic questions that are related. - The newly added related diagnostic question will have the same topics as the diagnostic question it is relating from. - On deletion of one of the diagnostic question which are related, only the question under deletion should be removed, while others are unaffected.	
14	Admin Related Diagnostic Question	When admin tries to add or edit a related diagnostic question.	The related question would have, - title - list of diagnostic questions that in relation - list of topics associated to these set of diagnostic questions.	
15	Admin All Users Data	Admin logs in and clicks on manage user button	Admin must be able to see all the users registered with this application. Admin must be able to see information like registered date, last logged date. Admin must be able to remove unwanted users. Admin must be able to add/edit/update User Roles	
16	Admin User Data	Admin selects one of the users on the manage user page	Admin must be able to see all the instances under this user. Admin must be able to navigate inside an instance and overview the status of the topics. Admin must be able to navigate inside a topic and overview the status of the module. Admin must be able to navigate inside a module and overview the status of the activity. Admin must be able to collect information regarding the user's interaction with the activity, like view the answers given by user.	

User interaction and design

Questions

Below is a list of questions to be addressed as a result of this requirements document:

Question	Outcome
Diagnostic - Will all the questions be on the same page?	No
Diagnostic - If the questions appear one at a time to the user, Can there be a scenario that one question is related to another question and a certain answer to this question decides whether the related question is shown or not?	Questions come all on the same page. There can be more than two questions that are related to one another.
Diagnostic Two related questions - - How to add a related question? - Edit a related question - removing a related question, removes the other question as well?	- Removing a related question does not affect other related question.
Diagnostic - Do we show the topics associated to a question while taking the diagnostic?	No
Profile - Can the user take a diagnostic test more than once?	Yes, Save an instance of the diagnostic with a name that can be accessed from the profile page.
Profile - If he does, then the application should be able to remember all his previous diagnostics and their progress?	Yes
Topics - Will there be a topic that appears both in the Basic as well as the customizable regions?	No

Admin Diagnostic - When adding a related diagnostic question,

- Will the topics associated with the original diagnostic question automatically be added to this questions associated topics?
- How would be the behavior, when a question is related to more than one question.
- Can a diagnostic question be associated with topics other than the topics from its related question?
- How would a user's answer to such scenario be treated as?

Here's a brief table that might help understanding the question.

Admin	Diagnostic Question 1	Diagnostic Question 2
Correct Answer	Yes	No
Associated Topics	Topic A, Topic B, Topic C	Topic B, Topic C, Topic D

The two questions are related to each other and Topic B and Topic C are the topics that are associated with both of these questions.

User's Answer	Diagnostic Question 1	Diagnostic Question 2	Topics added to user's profile
	Yes	Yes	Topic A
	Yes	No	Topic A, Topic B, Topic C, Topic D
	No	Yes	No topics
	No	No	Topic D

- If question 3 is related to question 1 and question 2, does it mean that question 1 and question 2 are related to each other?

The tables correctly display the results of this scenario. Each question has topics like A and D which are independently associated with a specific answer to that question, and only that question. Each question also relies upon a certain answer, along with a certain answer to another question, in order to result in Topics B and C.

If there is a third Question required for a topic, similar to how Topics B and C only result from the right combination of answers to Questions 1 and 2, there should then be the possibility that a Topic E would result only from the correct answers to Questions 1, 2, and 3. The independent results like Topics A and D would still exist for each Question. Topics requiring that only two of the Questions be answered correctly, like Topics A and B, would also still exist and not be linked to the third Question.

Admin Diagnostic - Is it safe to assume that two diagnostic question from different categories cannot be related?

User Diagnostic - Can user answer diagnostic questions from different categories in a single custom instance ?

User Diagnostic - What if the user tries to customize the tutorial and while answering the diagnostic questions, he/she answers all the questions with an answer that is not associated with any topics. (Although this scenario is very much impossible, given that he/she is interested in taking a tutorial). How would the application behave if this situation had to occur?

TODO:

☐ Avoid User from accessing admin pages during his session.

Not Doing