Q1:

Software Requirements Specification

for

Edunext Website

Version 1.0 approved

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Q2:

1. In this exam paper, the name of the rectangle is: Edunext Website
2. The actor may be human, other software systems or devices. In this exam paper, list the name of >= 3 actors is: Student, Teacher, FAP system
3. In this exam paper, list the name of >= 5 use cases are:

* Import student data list from FAP
* Display student list
* Update student list
* Add questions
* Update questions
* List questions
* Create student groups
* Answer questions by students
* Vote answers by students
* Vote answer by teacher
* Signin Edunext
* Record data of the interaction process
* Reply the answers

1. The actors are inside or outside of the rectangle?

The actors are outside the rectangle

1. The ovals represent the use cases are inside or outside of the rectangle?

The ovals represent the use cases are inside rectangle

1. The primary actor of the use case **add new question** is: teacher
2. The secondary actor of the use case **add new question** is: student
3. Based on the fact you already used EduNext website. The use cases in this exam paper may have relationship.

8.a List the name of two use cases that have **extend** relationship:

* Answer Question, Vote Answered Question

8.b The name of **base use case (in 8.a)** is:

* Answer Questions

8.c The name of **included use case (in 8.a)** is :

* Vote Answered Question

8.d The dashed line with an arrow that points to which use case? (student write the name of use case)

* The dashed line with an arrow that points to Vote Answered Question

1. Based on the fact you already used EduNext website, the use cases in this exam paper may have relationship.

9.a List the name of two use cases that have **include** relationship:

* Signin, List Of Class

9.b The name of **based use case (in 9.a)** is:

* List Of Class

9.c The name of **extend use case** **(in 9s.a)** is:

* Signin

9.d The dashed line with an arrow that points to which use case? (student write the name of use case)

The dashed line with an arrow that points to Signin

Q3:

|  |  |  |  |
| --- | --- | --- | --- |
| UC ID and Name: | UC01 - add(+) new question | | |
| Created By: | QuangTA HE161550 | Date Created: | 25/03/2023 |
| Primary Actor: | Teacher | Secondary Actors: | Student |
| Trigger: | Teacher click on “Add question” button to add new question | | |
| Description: | This use case describe how to add new question to the Edunext website for student to give the answer | | |
| Preconditions: | 1. Access to Edunext website 2. Logged into Edunext website with @fpt.edu.vn email 3. Access to add question page | | |
| Postconditions: | 1. Successful adding new question into Edunext database 2. The question after added was available on the list of question for student to answer | | |
| Normal Flow: | 1. Teacher choose code of subject need to add question 2. Teacher choose code of class need to add question 3. Teacher click on slot need to add question 4. Teacher create group 5. Click on “Add question” button 6. Set title question and content for question 7. Click on “Start” button to start question 8. Choose option for added question: time and date limitations | | |
| Alternative Flows: | 7. If teacher doesn’t set tittle or content for the question, back to step 6 | | |
| Exceptions: | N/A | | |
| Priority: | High | | |
| Frequency of Use: | Daily | | |
| Business Rules: | BR-1: Only teacher can add new question  BR-2: Question must has tittle and content | | |
| Other Information: | None | | |
| Assumptions: | AS-1: Teacher account has been granted permission to add new question to the Edunext website | | |

**Q4:**

a. The term of most important non-functional requirement for EduNext website is Security.

Statement 1: All the data entered by students and teachers must be encrypted using industry-standard encryption algorithms such as AES-256.

Statement 2: The website must require signin to Edunext website by @fpt.edu.vn email for all users to prevent unauthorized access.

b. The term of second important non-functional requirement for EduNext website is Response time and Throughput.

Statement 1: All the functionalities of the website must load less than 3 seconds when accessed from a desktop or laptop and within 5 seconds when accessed from a mobile device.

Statement 2: The Edunext website must be able to handle a certain number of concurrent users and transactions persecond, such as supprting 1000 concurrent students accessing to slot of subject.

a. Security is the most crucial non-functional requirement for EduNext website, which entails encrypting all user data using industry-standard encryption algorithms like AES-256 and mandating sign-in through @fpt.edu.vn email to prevent unauthorized access.

b. Response time and Throughput are the second most important non-functional requirements for EduNext website, which require all features to load within 3 seconds on desktops or laptops and 5 seconds on mobile devices, and the ability to handle a specific number of concurrent users and transactions per second, such as supporting 1000 students accessing a subject slot simultaneously.