**Report No.3: Software Requirements Specifications (SRS)**

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| --- |
| Project Success Criteria |
| * The project that finishes in scheduled time, within the allocated budgets and which satisfies the customer requirements. * All high-priority functionality defined in the requirements specification is delivered in the first release. * Open-sources are optimized closely, less complexity, improving quality of the system. * The estimated number of residual defects does not exceed 3 per function point. * Prerelease development rework does not exceed 15 percent of total development effort. |

# 3.1. User Requirement Specification

|  |  |  |  |
| --- | --- | --- | --- |
| Type | Code | Name | Description |
| *Common User Requirement* | EL\_CUR\_UR1 | Interface | * The system shall provide Vietnamese interface. * The system need have the friendly graphical user interface, visual, lifelike, logical layout. |
|  | EL\_CUR\_UR2 | Announcement | The system will release an announcement if the result was not found. |
|  | EL\_CUR\_UR3 | Register/ login | Users can register and login easily and quickly. |
|  | EL\_CUR\_UR4 | Categorize | Data will be categorized efficiently to help user to search conveniently. |
|  | EL\_CUR\_UR5 | Question bank | The system will provide many kinds of exercises, questions and answers for students. |
|  | EL\_CUR\_UR6 | News providing | The system will provide news about education and university entrance exam… |
|  | EL\_CUR\_UR7 | Search | The system allows users to search for goods quickly, efficiently. |
|  | EL\_CUR\_UR8 | Testing online | Admin will create tests and user can choose a test to do. |
| *Business User Requirement* | EL\_BUR\_UR1 | Performance | The system should optimize to operate stably, improve quality to create competitive advantage. |
|  | EL\_BUR\_UR2 | Decentralization | The system need divide authority for each group: admin, mod, user, teacher… |
|  | EL\_BUR\_UR3 | Security | Commit that the system operate stably. It is very bad when users visit the website or manipulate on it while server die or other crash. |
|  | EL\_BUR\_UR4 | Statistic | The system will provide statistic about number of users visit the website. |
|  | EL\_BUR\_UR5 | Administrator | The system provide administrator site: admin can configuration for system and update database on the website. |
| *Single User Requirement* | EL\_SUR\_UR1 | Studying online | The system will provide theory site: showing theories and knowledge of subjects and refer exercises, and objectives. User can study and practice together. |
|  | EL\_SUR\_UR2 | Report | After testing, the system will send result for user. There are 2 kinds of report: basic and detail. The basic report will show point and time to use to user. The detail report will provide more information: detail about answers which user chooses. |
|  | EL\_SUR\_UR3 | Forum | The system will have forum site: this site is a place which members can share experience, discuss, and exchange some problems need care. |
|  | EL\_SUR\_UR4 | Case study | The system will provide case study for each question. Users can self-study better. |

# 3.2. System Requirement Specification (Specific Requirements)

## 3.2.1. External Interface Requirements

**3.2.1.1. User Interfaces**

A user behavior pane will be available in all workflow scenarios to allow easy access to online help and next-step options. The navigation options in every screen will be similar to lower or eliminate the system learning curve. Input confirmation and error notification will be consistent throughout the application.

**3.2.1.2. Hardware Interfaces**

- Common peripheral devices:

* ADSL (or wireless) modem and cable internet
* Mouse
* Keyboard

- Required (minimum) specifications:

* CPU: Intel® Pentium® 4 2.4 GHz or better supported
* RAM: 512MB (768MB for Windows 7)
* Hard Drive: 2GB of free space

- Recommended specifications:

* CPU: 2.4 GHz dual core or better supported
* RAM: 1GB for XP, 2GB for Windows 7
* Hard Drive: 2GB of free space

**3.2.1.3. Software Interfaces**

“E-Learning” system can run on any platform/operating system (includes Windows, Mac OS, and Linux). That support browsers listed below:

* Firefox (3.0 or higher)
* Google chrome (9.0 or higher)
* Internet Explorer (7.0 or higher)

**3.2.1.4. Communications Protocol**

The system will require communication via the Hyper Text Transfer Protocol (HTTP) to complete interactions based services with client computers. “E-Learning” system also requires a web browser to function. The Web Browser must comply with standards for HTTP version 1.0 or 1.1 HTTP version 1.0 is a well-founded and highly supported protocol. Now considering legacy by some organizations, we believe this is a safe foundation for the system.

The system also indirectly requires some network connection to the internet, over which it may communicate in HTTP. This network connection assumes a physical or wireless connection from the client computer to a consumer Internet Service Provider (ISP) or enterprise environment Local Area Network (LAN).

## 3.2.2. System Features

**3.2.2.n. System Feature n**

3.2.2. Use Case-n Diagram (otherwise use another model)

3.2.2. Use Case-n Specification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE- SPECIFICATION** | | | | |
| **Use-case No.** | <UC001> | **Use-case Version** | | <1.0> |
| **Use-case Name** | <Name> | | | |
| **Author** | <Members> | | | |
| **Date** | Dd/mm/yyyy | **Priority** | <High/Normal/Low> | |
| **Actor:**  *<Lit all actors>*  **Summary:**  *<Briefly describe the used case >*  **Goal:**  *<Briefly describe the goal of used case >*  **Triggers**  *<What does lead in using this case?>*  **Preconditions:**  *<List the required pre-conditions for using this case>*  **Post Conditions:**  *<List the required post-conditions for using this case>*  **Main Success Scenario:**  *<List the main steps for using this case to reach the goal successfully >*  **Alternative Scenario:**  *<List other steps for using this case to reach the goal in some alternative conditions >*  **Exceptions:**  *<List exceptions of this use case >*  **Relationships:**  *<List the relationships that use case relates to>*  **Business Rules:**  *<Any concern about the business>* | | | | |

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## 3.2.3. Software System Attributes

**3.2.3.1 Reliability**

**3.2.3.2 Availability**

**3.2.3.3 Security**

**3.2.3.4 Maintainability**

**3.2.3.5 Portability**

**3.2.3.6 Performance**

# 3.3. Entity Relationship Diagram or Data Structures

*<Provide the ERD Diagram for the system here. If your team uses a file or in-memory storage facility instead of a database, replace this section by ‘Data Structures’. Note, use only ERD or Data Structures>*

# 3.4. Other material (if any)