**SYSTEM OUTLINE**

**Create an Interactive Quiz System**

* The system allows the **users** to **create** **quizzes.**
* Each **quiz** **can** **contain** several questions:
  + Each **question** is a multiple choice (**2**, **3** or **4** **answers**), with exactly **one** **correct** answer.
  + Each **question** has a **predefined** **timeout**.
* The **quizzes** can be **shared** with other **registered** **users**.
* Only the **creator** **of the** **quiz** can **edit** the quiz.
* **Any** **user (including the creator)** who **has** **access** to the quiz **can** **start** the quiz.
  + The user that can start the quiz is called a “host”.
* Once a **quiz** is **initiated** by a **host**, a **unique** **number** is **generated**.
* The **players** can **join** the **quiz** via their own device using the **unique** **number**.
* The **host** can **begin** the initiated **quiz** at any point, which will go through the **predefined** **question** for the quiz.
* For **each question** it is **finished** when:
  + **All** **participating** **players** have **answered** the question.
  + The question **time** is **up**.
  + The **host** **terminates** the question early.
* **After** **each** **question**, a **summary** of the answers is **displayed**, before the host starts the next question.
* At the **end** of the quiz:
  + A **report** is **produced**.
  + The **report** is **displayed**.
  + The **report** is **stored** in the host account.

**TASKS**

**Maximum Size – 11 pages**

1. **Brief title/Introduction/Comments**.

* These should include a brief description of each member’s contribution.
* Max –> 1 page.

2. **Scope of the System**.

* Define the scope of the system. This should include:
  + Need;
  + Goals;
  + Business Case;
  + Stakeholders;
  + High-level operational concepts;
  + Other…
* Max –> 1 page.

3. **Two full scenarios, each covering one of**:

* A **user** **signs** **in** and **creates** a new **quiz** containing **several** multiple choice **questions**. **After** **finishing** the **quiz**, the **user** **shares** it with **another** registered **user** and **logs** **out**.
* A **host** **signs** **in** and **starts** an **existing** **quiz**. The **players** **join** in and **answers** the **questions**.
* **For each** max -> 1 page.

4. **Two full use case descriptions.**

* **For each** max -> 1 page.

5. **A use case diagram**.

* The diagram should be produced with a drawing tool. (**Visual** **Paradigm**)
* Max-> 1 page.

6. **A class diagram including:**

* **Attributes;**
* **Operations;**
* **Associations;**
* **Multiplicities;**
* **Inheritance;**
* The diagram should be produced with a drawing tool. (**Visual** **Paradigm**)
* Max -> 1 page.

7. **Two sequence diagrams corresponding to the two scenarios above**. (5 & 6)

* The diagram should be produced with a drawing tool. (**Visual** **Paradigm**)
* **For each** max -> 1 page.

8. **An activity diagram for running a quiz.**

* Max -> 1 page.

**PRESENTATION**

Credit will be given for:

* Covering all specified functionality in:
  + Use case analysis;
  + All required structure in class analysis.
  + All required behavior in dynamic analysis.
* Correct and appropriate use of style and notation. (simple and maintainable models)
* Neat and readable presentation.