**ARCHITECTURE TESTING SYSTEM**

|  |  |  |  |
| --- | --- | --- | --- |
| **ROLE** | **COMMANDS** | **INPUT DATA** | **OUTPUT DATA** |
| **TUTOR** | 1. **Generate Questions**    1. **Chose the Subject**    2. **Enter the question**    3. **Enter the correct answer**    4. **Enter two incorrect answers** | **1.Query(SUBJECTS.IDSubject)**  **1.1. waiting answer of Tutor –TutorIdSubject**  **1.2. waiting answer of Tutor –TutorQuestion**  **1.3. waiting answer of Tutor –CorrectAnswer**  **1.4. waiting answer of Tutor –IncorrectAnswer (for int i=2)** | **1.2.Insert (QUESTIONS. IDQuest, NameQuest, IDCorrectAnswer) ) where IdSubject= TutorIdSubject**  **1.3.Insert (**  **ANSWERS.IDAnswer, NameAnswer, IDQuest)** |
| **TUTOR** | 1. **Form Test**    1. **Chose the Subject**    2. **Write № of Test**    3. **Write number of questions** | **1.Query(SUBJECTS.IDSubject)**  **1.1. waiting answer of Tutor -TutorIdSubject**  **1.2. waiting answer of Tutor -TutorIdTest**  **1.3. waiting answer of Tutor-TutorNumberQuests** | **Random Insert (QUESTIONS. IDTest= TutorIdTest) where IdSubject= TutorIdSubject**  **While (TutorNumberQuests=true)** |
| **STUDENT** | 1. **Show Tests** | **Query(QUESTIONS. IDTest)where IDTest<>0** |  |
| **STUDENT** | 1. **Pass the exam**    1. **Choose the №Test (StudentIdTest)**    2. **Choose the №Answer (StudentIdAnswer)** | **2.Query(QUESTIONS. IDTest)where IDTest<>0**  **2.1.Query (QUESTIONS. NameQuest, IDQuest) where IDTest= StudentIdTest**  **2.2. Query(ANSWERS. NameAnswer) where IDQuest= Query\_IDQuest (from 2.1.)** | **Insert (USERS.Passed=Yes) if (StudentIdAnswer= QUESTIONS. IDCorrectAnswer) where QUESTIONS. IDQuest= QueryIDQuest** |

**Table1: USERS**

|  |  |  |  |
| --- | --- | --- | --- |
| **login** | **passport** | **role** | **passed** |
|  |  | **Tutor** |  |
|  |  | **Student** | **Yes/No** |

**Table2: SUBJECTS**

|  |  |
| --- | --- |
| **IDSubject** | **NameSubject** |
| **1** | **Java Core** |
| **2** | **Java Junior** |
| **3** | **Advanced Java** |
| **4** | **Java for Testers** |
| **n-2** | **Math** |
| **n** | **………** |

**Table3: QUESTIONS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IDQuest** | **NameQuest** | **IDCorrectAnswer** | **IDSubject** | **IDTest** |
| **1** | **What innterfeces of collections do you know?** | **2** | **4** | **1** |
| **n** |  |  |  |  |

**Table4: ANSWERS**

|  |  |  |
| --- | --- | --- |
| **IDAnswer** | **NameAnswer** | **IDQuest** |
| **1** | **Set, Get, Got** | **1** |
| **2** | **Set, Quiu,List** | **1** |
| **3** | **Unic, Map,Vector** | **1** |
| **n** |  |  |