Cairo University Faculty of Computers and Information



**CS352 – Software Engineering II**

**Phase 1 Template**

**2017**

**Project Team**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Name** | **Email** | **Mobile** |
| 20140128 | RemonAtef | [remonatef128@yahoo.com](mailto:remonatef128@yahoo.com) | 01285129556 |
| 20140116 | Rami Mohamed | [ramimohamedsalah96@gmail.com](mailto:ramimohamedsalah96@gmail.com) | 01149273153 |
| 20140056 | Islam Emam | [islam.emmo@gmail.com](mailto:islam.emmo@gmail.com) | 01127321234 |
| 20140109 | Khaled Yousef | [khaledyousef196@gmail.com](mailto:khaledyousef196@gmail.com) | 01114300109 |
| 20140313 | Yasser Mohamed | [co2yasser@gmail.com](mailto:co2yasser@gmail.com) | 01115658342 |

**Staff:**

**DrAmrKamel** [a.kamel@fci-cu.edu.eg](mailto:a.kamel@fci-cu.edu.eg)

**DrKhadiga Mohamed kelbedweihy@fci-cu.edu.eg**

**TAs: EngRagia Mohamed r.mohamed@fci-cu.edu.eg**

Contents

[Instructions [To be removed] **Error! Bookmark not defined.**](#_Toc476413280)

[Review Check List 2](#_Toc476413281)

[Testing 4](#_Toc476413282)

[Git repository link 6](#_Toc476413283)

# Review Check List

**Design and Code Checklist**

**Design Principles**

1. Does the design follow SOLID principles? ∏ What %40…… Related Issues:

Single Responsibility: Class Game Data\_Base has 3 functions that could cause it to change.

Open Close: Class Teacher and Teacher\_DB (or student and student\_DB) are connected directly so any change in any of them will cause a change in the other class.

Dependecy Inversion: as the classes depend in each other directly without any interfaces to manage between them.

1. Does the design follow OOP rules? ∏ What % 25…… Related Issues:

All classes lack the private attributes and all the attributes are public.All classes don't have constructors. No setters&getters in classes: Teacher\_DB,Student\_DB,Field,Account,Category,Game\_DB.

1. Is the design simple and easy to modify? ∏ What % 40…… Related Issues:

Relationships between classes are complicated and hard to understand.

The names of the variables and attributes are too vague and don't express what they do.

**Coding Standards**

1. Is the code understandable and readable? ∏ What % 30… Related Issues: for example class game ,GameDb, Register are hard to understand.
2. Does the code follow Java Coding Style? ∏ What % 40… Related Issues:

Lots of confusing variables, some abbreviations in object names and Function names starts with capital letter .

1. Is indentation used properly? ∏ What % 50… Related Issues: some lines are more than 80 character , code lines has no spaces between them .
2. Do variable have good names? ∏ What % 5… Related Issues: most of variables has bad naming, and confusing.

**Comments**

1. Is the code commented enough? ∏ What % 1 Related Issues: no comments in the whole projects.
2. Is every class and method commented? ∏ What % 1 Related Issues: no comments also.
3. Do comments follow Javadoc style? ∏ What % 0 Related Issues: no comments either.
4. Is Javadoc generated for all the code? ∏ What % 0 Related Issues: no java doc comments either.
5. Are there useless / wrong comments? ∏ What % 100 Related Issues: all comments are useless , the comments in the code are comments on a code statements.

**Code Structure**

1. Does the code follow the design precisely? ∏ What % 20 Related Issues: most of the design are not implemented such as setter and getter and class Register are not implemented.
2. Are there very long classes or methods? ∏ What % 90 Related Issues: there are some long methods that has lot of because some too much commented code such as in class Student\_DB in function Adds.
3. Is there repeated code ?(put put in a function) ∏ What % 0 Related Issues: no repeated code.

**Error Handling**

1. Does the code handle errors and exceptions? ∏ What % 0 Related Issues:

all functions in every class such as Student\_DB just throw exceptions with no handling.

1. Is defensive programming used to avoid errors? ∏ What % 10 Related Issues:

no defensive programming suck as no check on file existence before opening files , no check for arguments in functions.

**Logic**

1. Do loops have correct conditions and bounds? ∏ What % 100 Related Issues: no issues
2. Do loops always terminate?What % 80 Related Issues: for example class Student\_DB , function VerifyS() the loop can enter in infinite.

**Overall**

1. **Are the design and code of good quality?** ∏ What %30.

# Testing

* 1. **Teacher\_DBTest**

|  |  |  |  |
| --- | --- | --- | --- |
| **Number** | **Testing function** | **Description** | **Result** |
| **1.** | **AddT(Teacher x)** | **Testing function for AddT function in Teacher\_DB entity. This test case test the Adding of a new Teacher account to the system scenario**  **Assumption: mail,name,password can’t be null& mail is unique for each Teacher** | **2 passed , 6 failed** |
| **2.** | **verifyT(Teacher x)** | **Testing function for verifyT function. This test case test verification of the normal login scenario** | **3 passed , 4 failed** |
| **3-** | **LoadFields( )** | **Testing function for testing valid file SYSFields.txt reading from file into ArrayList fileds.** | **Passed** |
| **4** | **add\_account(Account y)** | **Testing function to test adding new accounts to file.** | **2 passed , 4 failed** |

# Git repository link

# <https://github.com/islam-Ellithy/EduGaming>