-Cairo University  
Faculty of Computers and Information



**CS251**

**Software Engineering I**

EBS

(Educational Brain Storming)

Software Requirements Specifications

<N2H Team>

December 2016

Contents

[Instructions 3](#_Toc468575260)

[Team 3](#_Toc468575261)

[Document Purpose and Audience 3](#_Toc468575262)

[System Models 3](#_Toc468575263)

[I. Class diagrams 3](#_Toc468575264)

[Important Algorithm 5](#_Toc468575265)

[II. Sequence diagrams 5](#_Toc468575266)

[Class - Sequence Usage Table 7](#_Toc468575267)

[Ownership Report 8](#_Toc468575268)

[Policy Regarding Plagiarism: 8](#_Toc468575269)

[References 8](#_Toc468575270)

[Authors 8](#_Toc468575271)

# Team

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Name** | **Email** | **Mobile** |
| 20140097 | Hazem Mohamed Taha Fouda | hazem.fouda1@yahoo.com | 01211122871 |
| 20140293 | Noura Mohi El deen | [nouramohi712@gmail.com](mailto:nouramohi712@gmail.com) | 01005016518 |
| 20140298 | Nourhan Mahmoud Zaki | nourzaki596@gmail.com | 01152275725 |

# Document Purpose and Audience

Document Purpose: This document describes class diagram and sequence diagram

Document Audience : TAs , Developers , Designers & Project Manager.

# System Models

## Class diagram:



| **Class ID** | **Class Name** | **Description & Responsibility** |
| --- | --- | --- |
| 10 | Account | Class Account has User name , age , ID , password , Mail , Gander and type of User .  responsible for User information as every User has an account and for user sign up |
| 100 | Teacher | Class Teacher is a type of class Account and teacher can also add a game and has a list of games |
| 101 | Student | Class Student is a type of class Account and student can play games and have its score in every game |
| 11 | Data\_manager | Class Data\_manager load and update data to information file “DB” and upload game into game file “DB” |
| 20 | SignUpForm | SignUpForm Is a class make a form to take needed information from user to signup |
| 201 | Registeration | Registeration is a class responsible for take information from SignUpForm and make a new account by this information after checking on that information |
| 30 | PlayForm | PlayForm Is a class make forms for sorting games by its type , playing a game and exit from a game |
| 301 | Game | Game is a Class has the information for every game |
| 3010 | True\_False | True\_False is a type of Class Game , it type is true and false games |
| 3011 | MCQ | MCQ is a type of Class Game , it type is mcq games |
| 300 | Categories | Is a class responsible for sorting list of games by different types |
| 40 | AddForm | AddForm is a class make a form enable teacher to add a game |
| 400 | Add\_Game | Add\_Game is a class responsible for saving a game which added by a teacher |
| 401 | Admin | Admin is a class has responsibility for reviewing the game which had been loaded by a teacher |

## Sequence diagrams

 num = 1

num = 2

 num = 3

### Class - Sequence Usage Table

| **Class Name** | **Sequence Diagrams** | **Overall used methods** |
| --- | --- | --- |
| Student | 3 | SaveDate |
| SignUpForm | 2 | Sign\_Up |
| Registeration | 2 | CheckInfo,Save\_data |
| Data\_manager | 2,1,3 | Update\_data, UploadGame, UpdateData |
| PlayForm | 3 | SortBy , play |
| Categories | 3 | SortBy |
| AddFrom | 1 | Add, Save |
| Add\_Game | 1 | AddGame , Save , CreateGame |
| Admin | 1 | Review\_game |
| MCQ | 3 | PlayMCQ |
| TF | 3 | PlayTF |

# Ownership Report

|  |  |
| --- | --- |
| **Item** | **Owners** |
| Class Diagram | *Hazem Mohamed Taha , Noura Mohi* |
| Sequence Diagrams | *Hazem Mohamed , Noura Mohi* |
| Class - Sequence Usage Table , Class Diagram Description , Document purpose and Audience | *Nourhan Mahmoud* |