

Cairo University
Faculty of Computers and Information



CS251

Software Engineering I

IntelliFun

Software Design

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CS251: Phase 2 – BGMS-16

Project: IntelliFun

Software Design Specification

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Team

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Document Purpose and Audience

The basic purpose of this document is to provide the readers which are mainly the developers with a detailed description of how the functional requirements will be implemented. This is presented visually using UML class and sequence diagrams. In addition, this document should be able to aid the developers during the implementation phase.



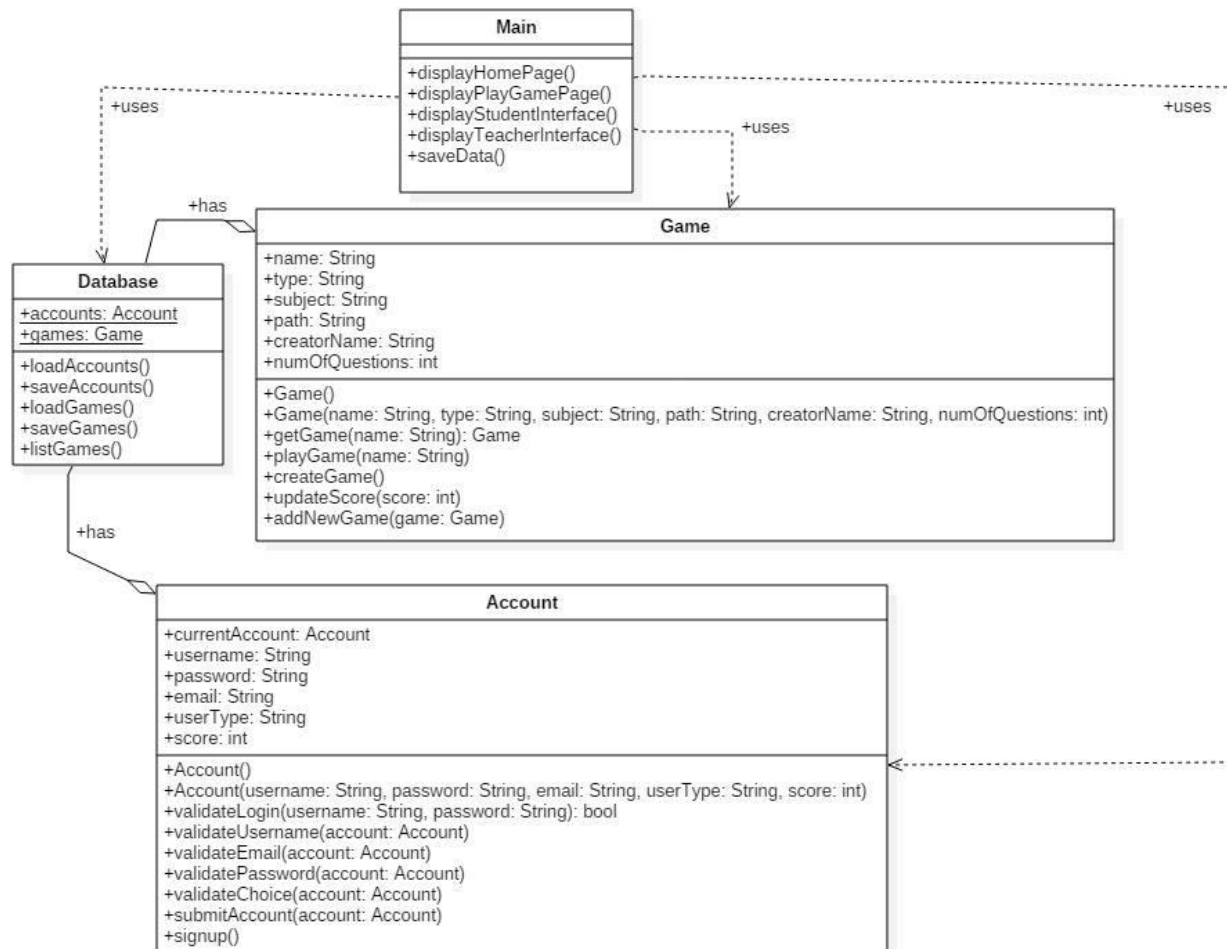
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System Models

I. Class diagrams





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Class ID	Class Name	Description & Responsibility
1	Main	This class is responsible for all user interface and interactions with the website.
2	Account	This class represents a user's profile, with its main attributes representing their name, email, etc. Moreover its main purpose is interacting with the database and creating a user's account after registration. A user can register as a student or a teacher. These two said types are two classes inherited from Account.
3	Game	This class represents a game's basic information as its name, template type, subject category, rating, etc. It holds the game-related functions that user are able to use and access, which are playing and creating games.
4	Database	This stores the database for the entire system, including all accounts registered and all games issued.



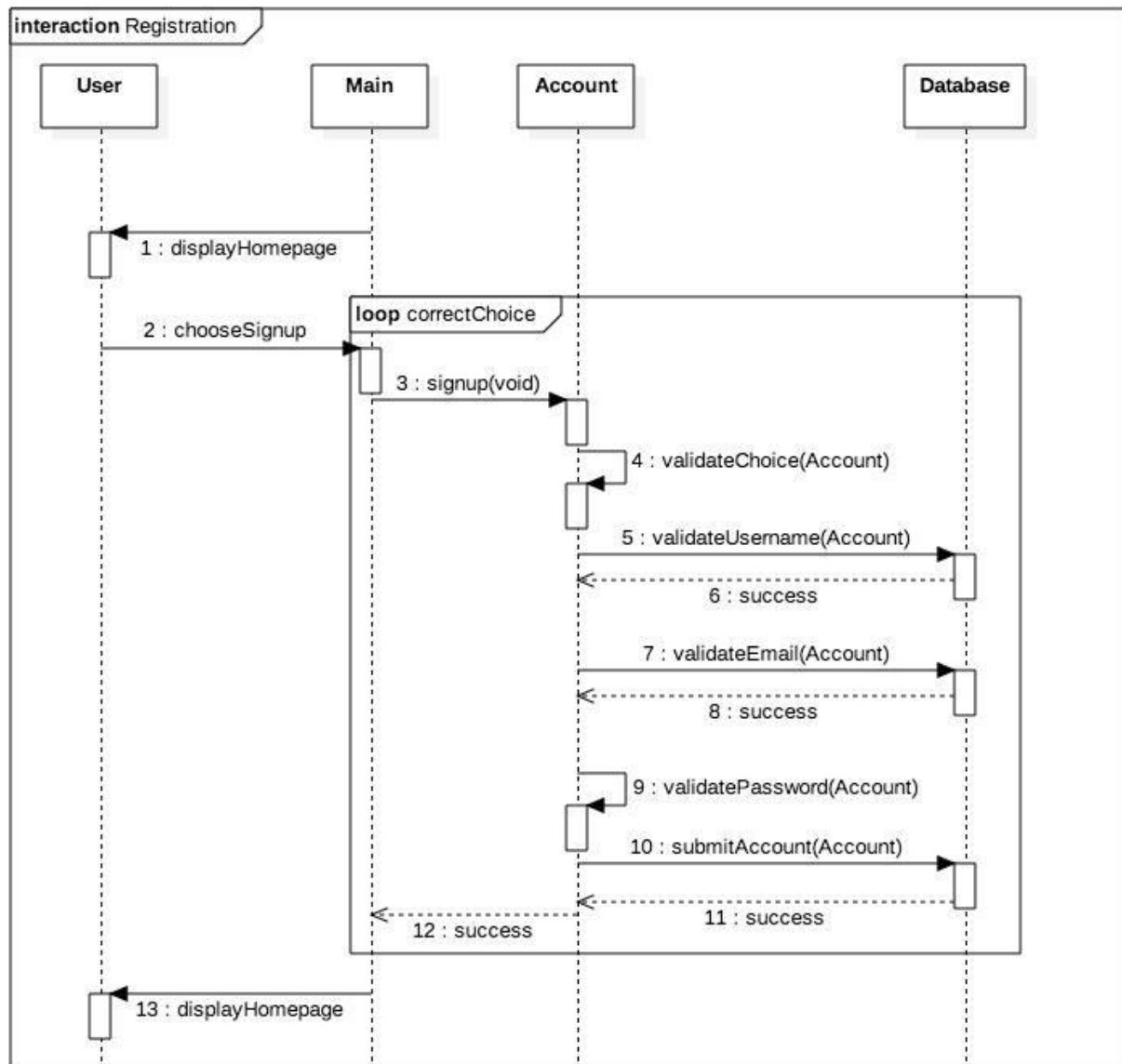
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II. Sequence diagrams

1.



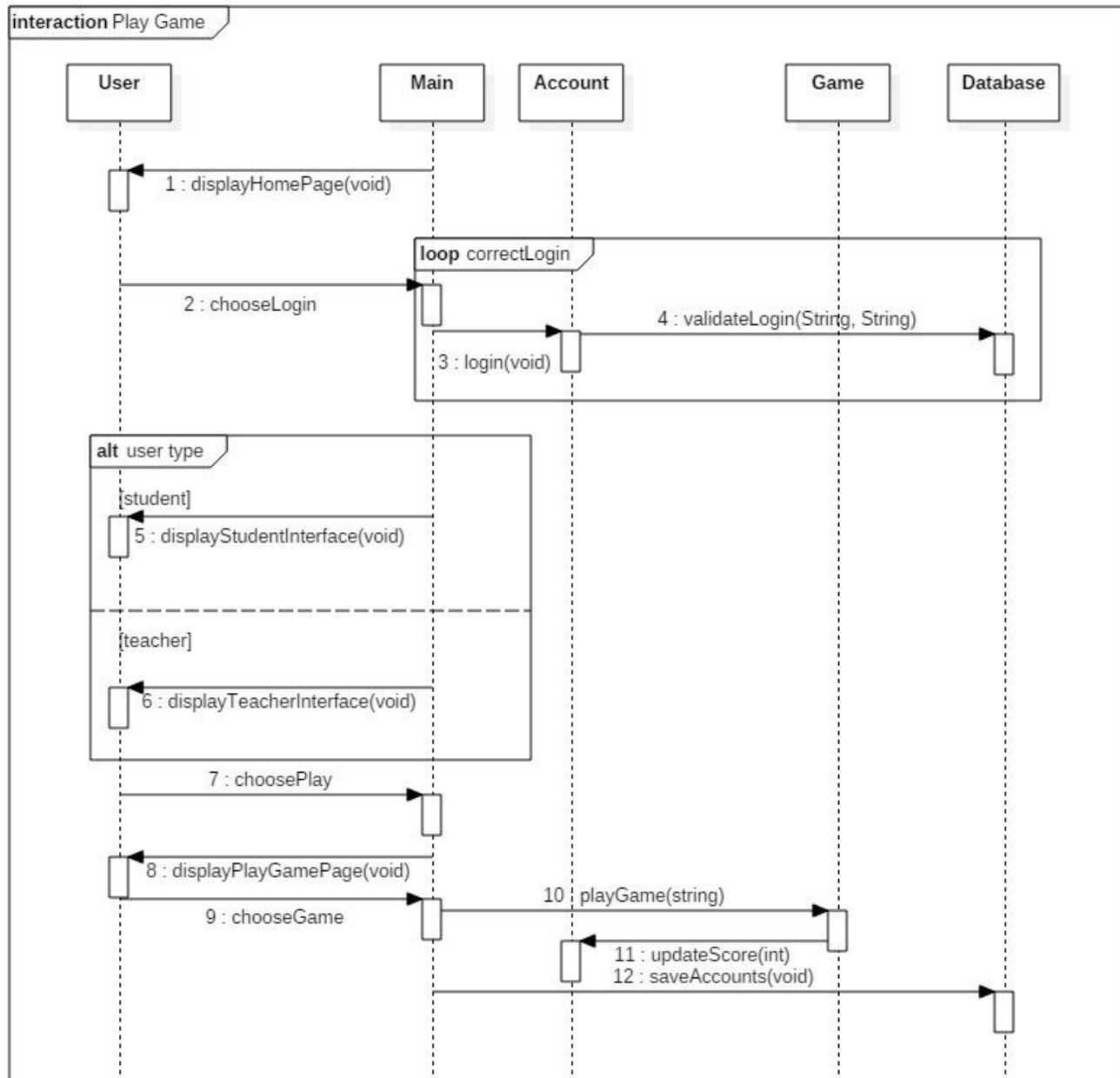


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2.



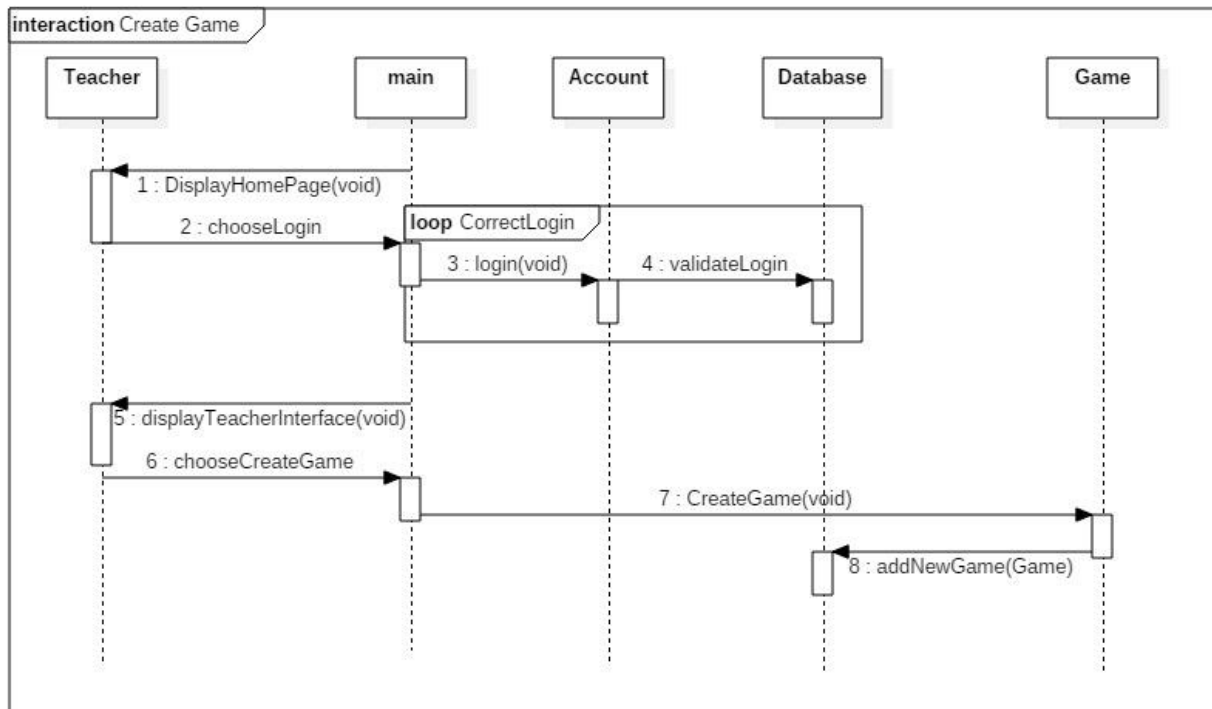


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3.





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Class - Sequence Usage Table

Class Name	Sequence Diagrams	Overall used methods
Main	1, 2, 3	displayHomePage, displayStudentInterface, displayTeacherInterface, displayPlayGamePage, saveData()
Account	1, 2, 3	validateLogin, validateUsername, validateEmail, validatePassword, validateChoice, submitAccount, signup
Game	2, 3	getGame, playGame, createGame, updateScore, addNewGame
Database	1, 2, 3	loadAccounts, saveAccounts, loadGames, saveGames, listGames

Ownership Report

Item	Owners
Class diagram	<i>Whole team</i>
Sequence diagrams	<i>Whole team</i>