

Cairo University
Faculty of Computers and Information



CS251

Software Engineering I

Time to Learn

Software Design

TenCent .1\$

December2016



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Software Design Specification

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Team

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Document Purpose and Audience

This document is a description of the project in details, it shows all the steps that we will use to implement the project; also it shows the class diagram of the system and the relations between the classes, and description for each class and the relations between them. As well as it describe the sequence diagram of the system and lists all the requirements. The target audience Doctor and TA



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Class ID	Class Name	Description & Responsibility
1	Website	Acts like a bridge between the system and User
2	WebInterface	It allows the user to interact with the system
3	WebSystem	Controls all interactions between user and system
4	Login	Take the username and password to enter his account
5	RegistrationForm	Displays the Student Or Teacher Form the User has to fill to have an account
6	Registration	Contains all needed Information about User, it specifies the information I need about User , allows the user to save his registration Or Cancel it if he don't want to continue
7	StudentRegistration	Contains extra needed Information if the User is Student
8	TeacherRegistration	Contains extra needed Information if the User is Teacher
9	DataBase	Contains all System Database all accounts , Usernames , Passwords , Games any needed data have to be saved is saved inside it also validate login username and password , update account data , add new account to accounts and handle any exception or error happen during displaying website
10	Game	Describes the game type, Category, difficulty, number of levels and tutorial of each game and allow user to Play game , Finish game, Create game and Rate game
11	Tutorial	Control start and skip of each tutorial
12	AllGames	Contain all games available in the website , display games related to each category and display categories of subjects



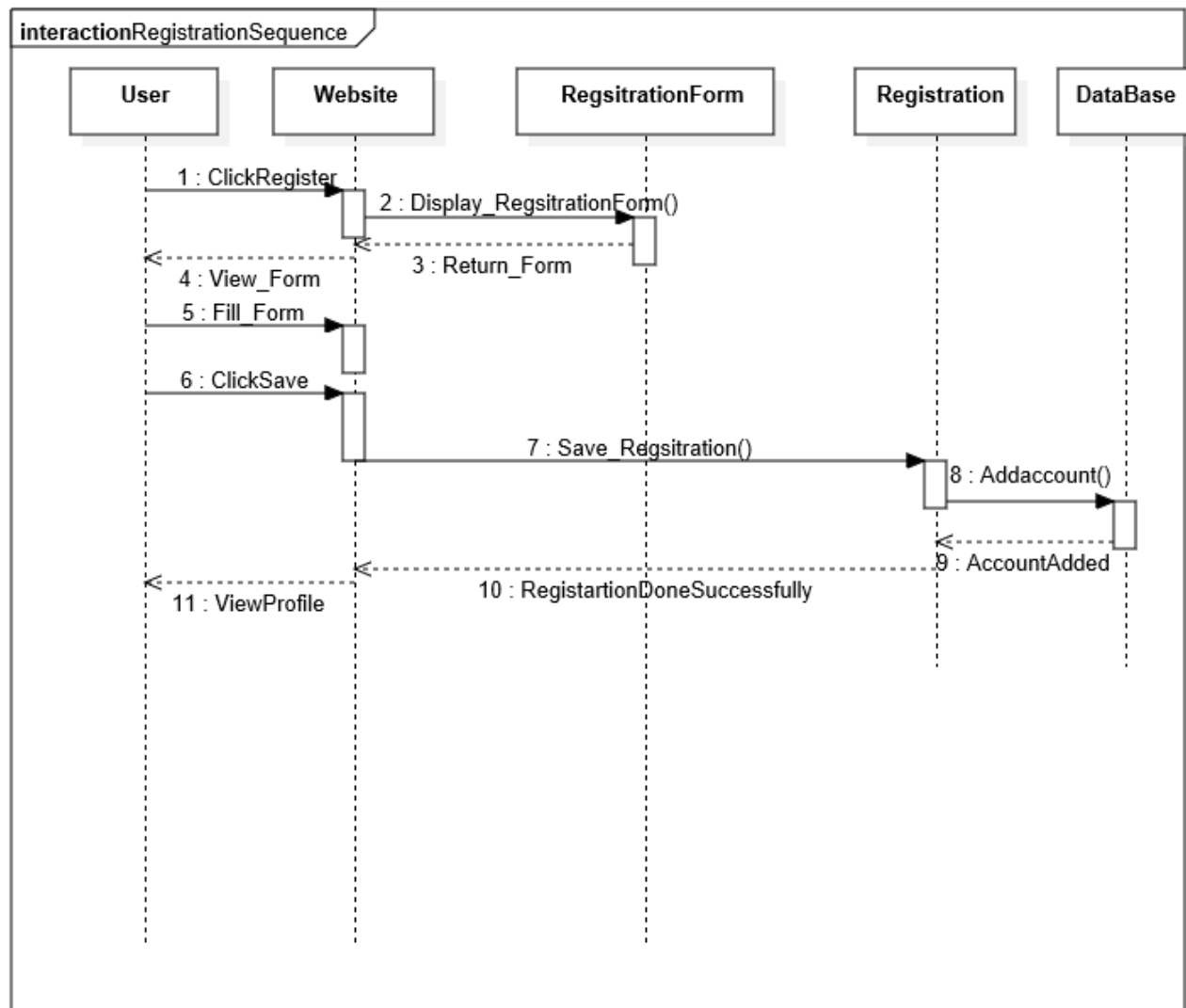
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II. Sequence diagrams

1-Registration Sequence (ID = 1):



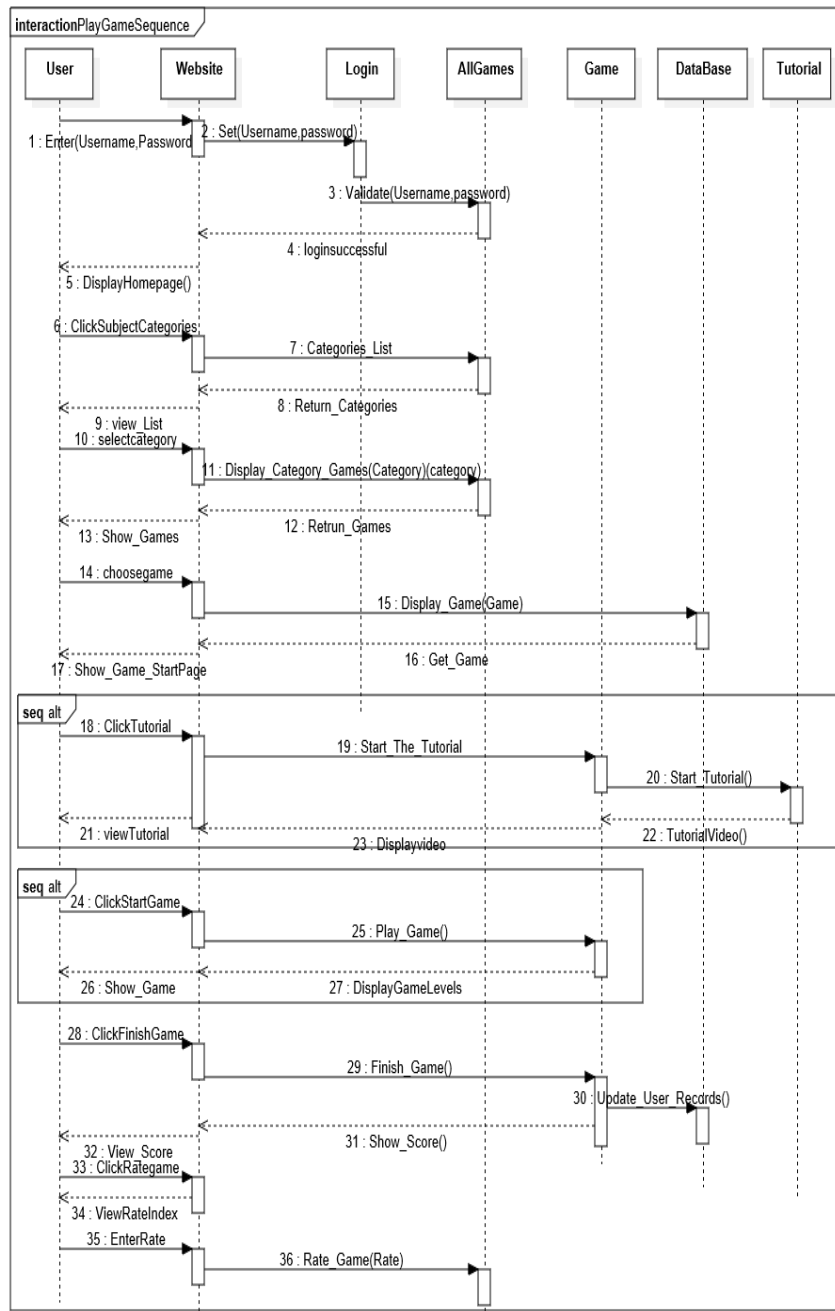


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2-Play Game Sequence (ID = 2):



2-Play Game Sequence (ID = 2):

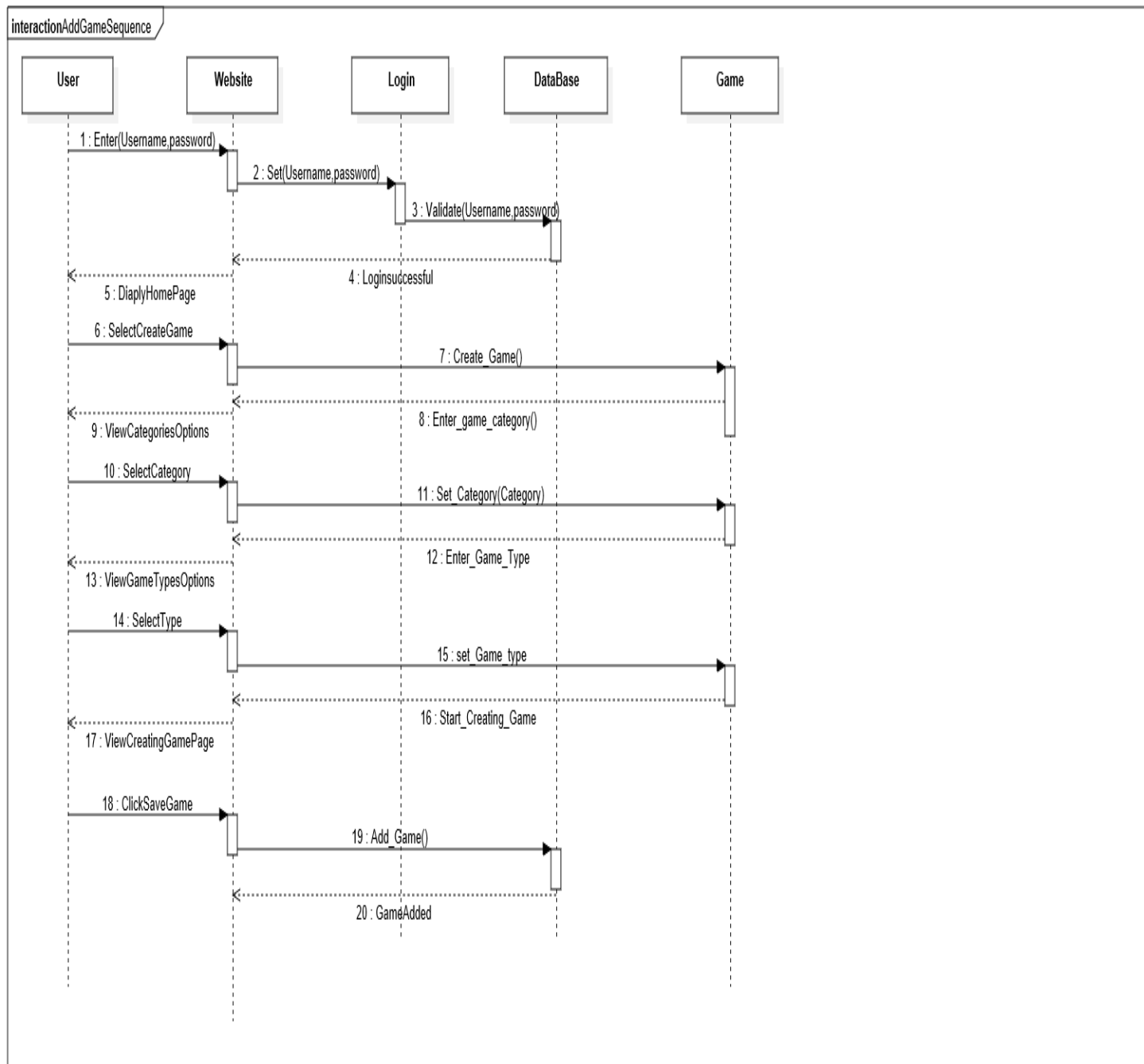


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3-Add Game Sequence (ID = 3):





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Class - Sequence Usage Table

Class Name	Sequence Diagrams	Overall used methods
Website	1 , 2 , 3	Enter(UserName,Password), displayhomapage, viewcategorieslist , show_Games,Show_Game_Startp age , Show_Game , viewScore , view_Categories_Options , Save , viewprofile
Login	2 , 3	Set(Username , password)
RegistrationForm	1	DisplayRF
Registration	1	SaveRegistration
DataBase	1 , 2 , 3	Addaccount ,Add game , Update user records , display game
Game	2 , 3	Create game , set category, set game type , Start the tutorial , play game , finish game , rate game
All Games	2	Categories list , display category games
Tutorial	2	Start tutorial

Ownership Report

Item	Owners
Class diagram	<i>Hamsa , Adham , Ahmed</i>
Sequence diagrams	<i>Hamsa, Adham , Ahmed</i>



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GitHub link:

https://github.com/HamsaMobarez/SoftWare_Project