

**Cairo University**  
**Faculty of Computers and Information**



# **CS251**

# **Software Engineering I**

Pre-teaching  
Software Design  
ITers

Month & Year



# CS251: Phase 1 – ITers – <Pre-Teaching>

## Software Design Specification

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## Software Design Specification

### Team

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### Document Purpose and Audience

- This Software is to make a useful learning system which makes us able to teach students in the best learning way.
- Audience: Client, Developers, Project manager, designers,

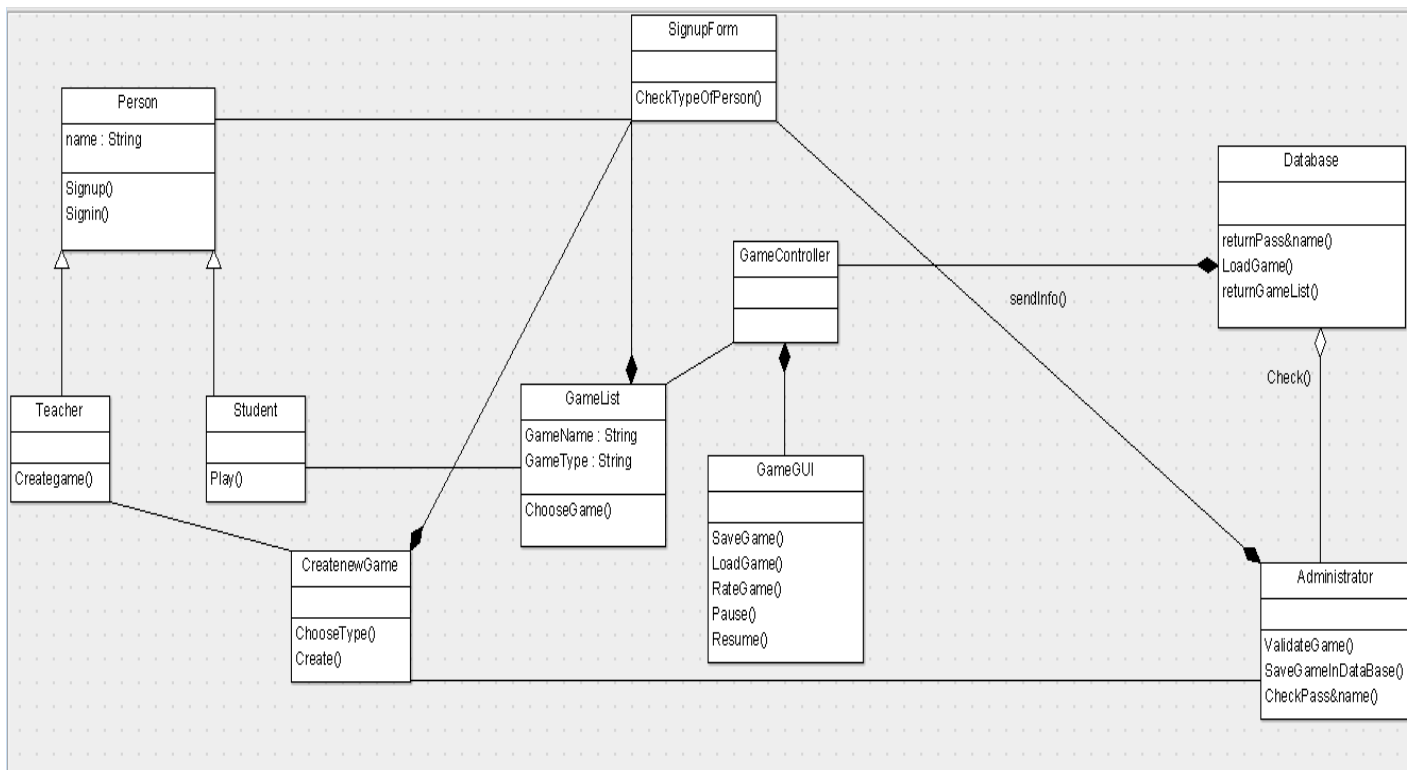


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### System Models

#### I. Class diagrams



Class ID	Class Name	Description & Responsibility
1	Person	
2	Teacher	Class for teachers' functionality that makes the teacher able to create game.
3	Student	For students to make them able to play games.
4	Createnewgame	
5	Signupform	An boundary class as an graphical interface appears to users in registration process.



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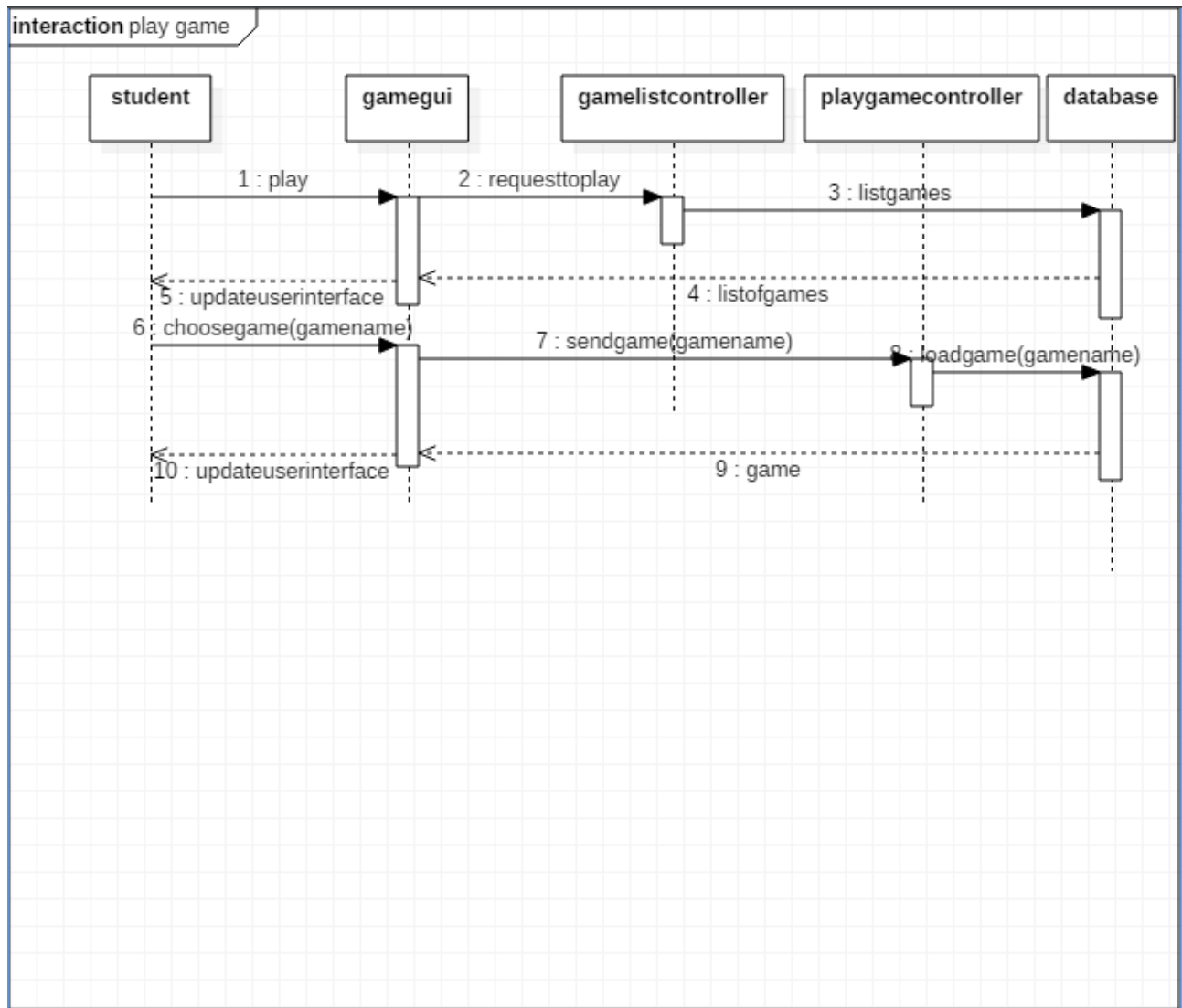
Class ID	Class Name	Description & Responsibility
6	GameList	Class that contains games' data
7	GameController	Class that control the communication between database and game GUI
8	GameGUI	An boundary class as an graphical interface appears to users during using the platform.
9	Database	Class that contain platform's all data
10	Administrator	Class that make the platform's admins able to control the platform.



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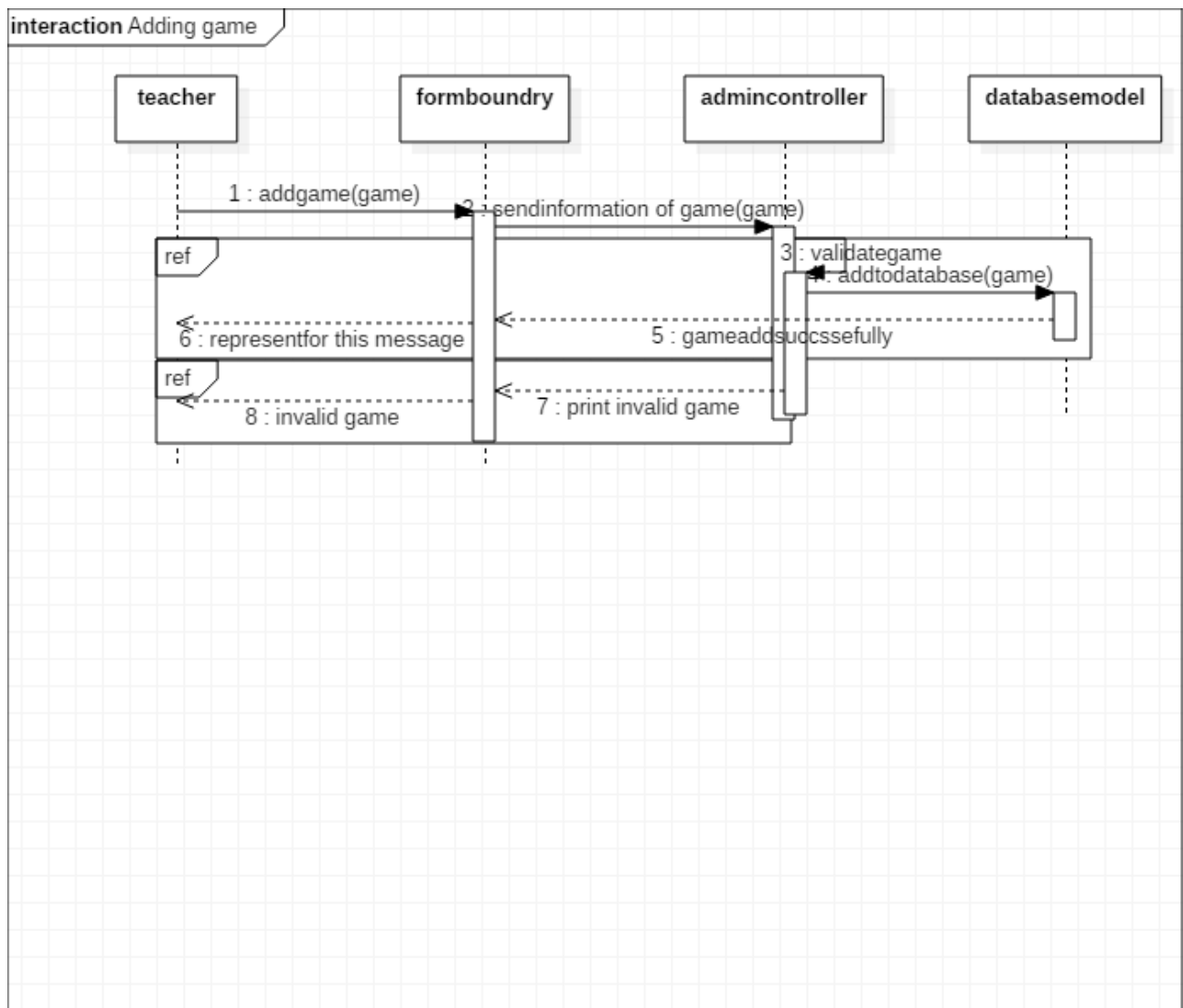
### II. Sequence diagrams





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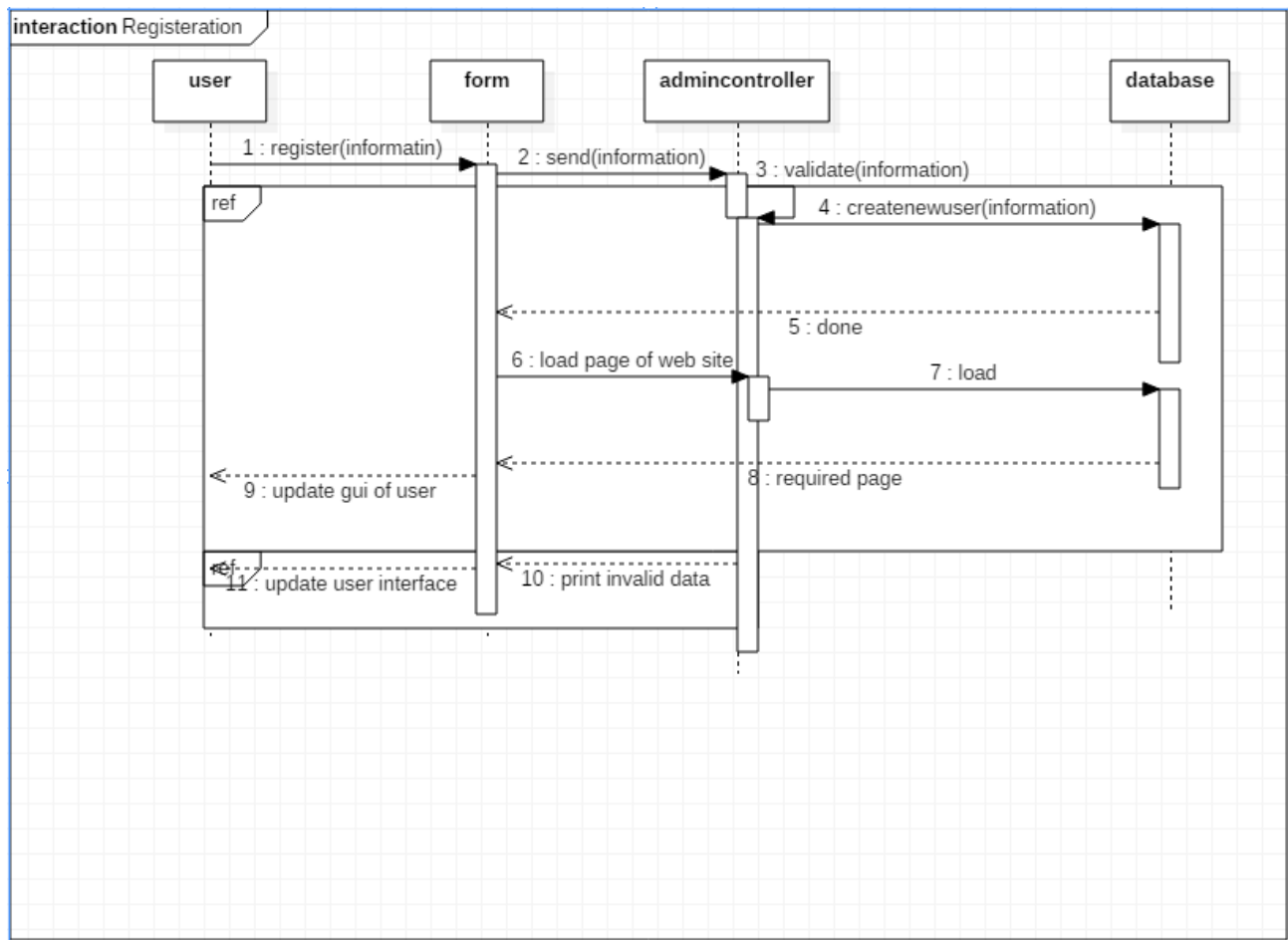
### Software Design Specification





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### Class - Sequence Usage Table

Class Name	Sequence Diagrams	Overall used methods
Teacher	2 , 3	Addgame , register
Student	1 , 3	Play , register
Signupform	3	Send , loadpage
GameList	1	listgames
GameGUI	1	Requeststoplay , sendgame
Database	1 , 2 , 3	Retrievedata
Administrator	2 , 3	Validate , load





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## Software Design Specification

### Ownership Report

Item	Owners
Sequence diagrams (Play game – Adding game)	<i>Mohamed Hesham</i>
Class diagram	<i>Mahmoud Fareed</i>
Sequence diagram (registration) – Documentation	<i>Alaa Ihab</i>