Software Design Specification For Bingo

Prepared by
Team Name: A2M2

Software Design Specification

Versions History

Date	Version	Description	Author(s)
15/11/2014	1.0	Initial version	A2M2

Approved by:

Eng. Mohammed Arnaoty

CS251: Phase 1 – A2M2
Project: Bingo (Multiplayer Distributed Game)

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Document Purpose and Audience

- **This document is the Software Requirements Specification (SRS) for Bingo Game. SDD usually accompanies an architecture diagram with pointers to detailed feature specifications of smaller pieces of the design. It is designed and written for stakeholders: professors and project developers.**
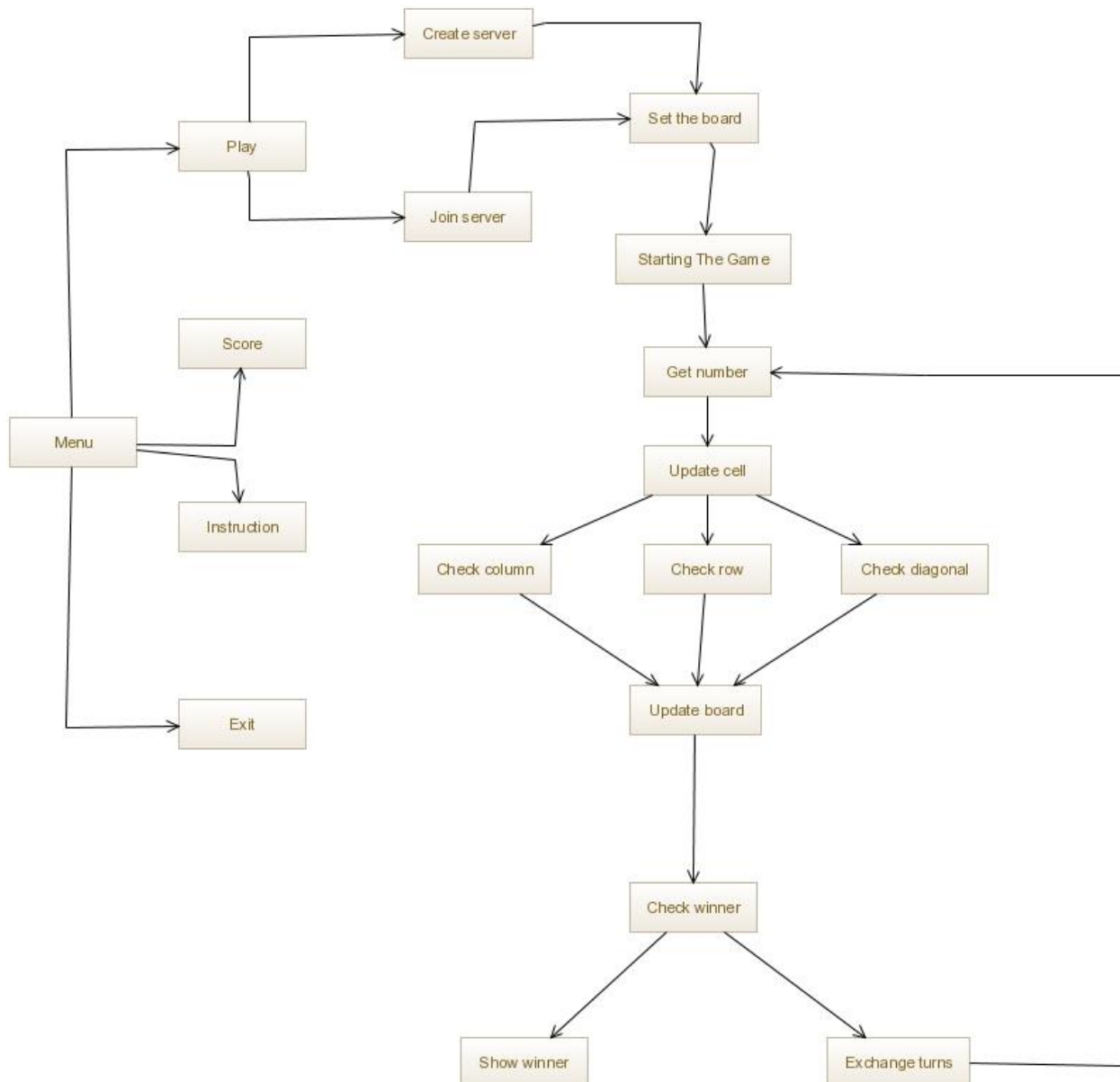
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System Models

System Decomposition

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Class diagram
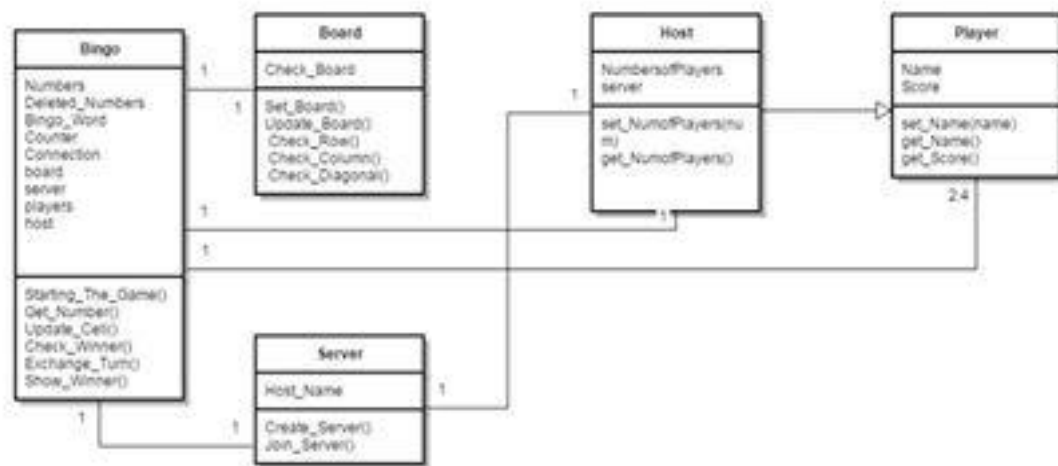
*Note: System can't be divided into sub systems because the server is taken place on one of user's device.

Class ID	Class Name	Description
1	Bingo	Each game has array of numbers , array of chosen numbers , array of players , counter and connection to start game Methods like Start , get number from player , update cell , check if one of the players won the game and if no body win exchange turn and at the end show winner

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| Class ID	Class Name	Description
2	Player	Each Player has name and score The player can set his name and get his name and score
3	Server	Each server has name and players can create one or join existing one
4	Board	Once all players joined the server the game board will be set and after every turn the board will be updated and check the row , column and diagonal

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Class ID	Class Name	Description
5	Host	The player who created the server and choose the number of players

Sequence diagrams
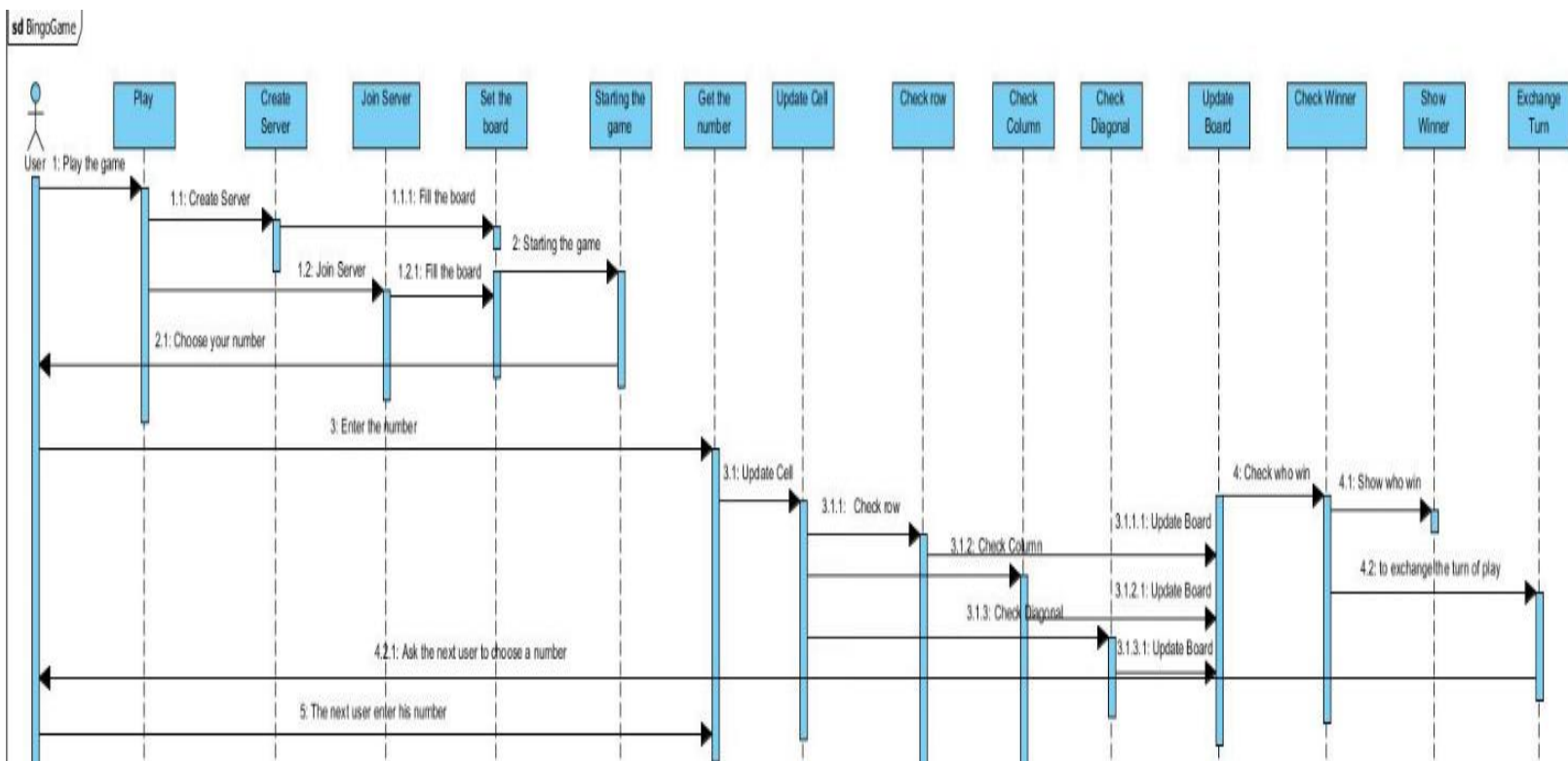
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Class - Sequence Usage

Class Name	Sequence Diagrams	Overall used methods
Server	1.1 , 1.2	Create_Server , Join_Server
Board	1.1.1 , 1.2.1 , 3.1.1 , 3.1.2 , 3.1.3 , 3.1.1.1 , 3.1.2.1 , 3.1.3.1	Set_Board , Update_Board , Check_Row , Check_Column , Check_Diagonal
Bingo	2 , 2.1 , 3 , 3.1 , 4 , 4.1 , 4.2 , 4.2.1= , 5	Starting_The_Game , Get_Number , Update_Cell , Check_Winner , Exchange_Turns , Show_Winner

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User Interface Design

Screen 1 – Main Interface

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Screen 2 – Play Interface

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Screen 3 – Score Interface

Bingo

Play:
Win:
Lose:
Level:

Back

Ownership Report

Item	Owners
Document purpose and Audience , Sequence Diagrams , User Interface Design	*Mahmoud Mohamed Gamal , Amr Sameh Rafaat*
System Decomposition , Class Diagrams	*Mahmoyd Hamdy Sayed , Amr Abo El-Aila*