**BlackJack .Net Final Assignment**

By Eran Zimbler ID 65970055

**Class Overview**

BlackJackDB

BlackJackDB.BlackJackDataEntities

* Using the Entity Framwork in ModelFirst operation this is an automatic class created by the model

BlackJackDB.DAL

* Main Class for interacting with the Database which is using the Entity Classes directly including all the Data actions

BlackJackDB.Game

* Automatic class based on the model for holding a game

BlackJackDB.User

* Automatic class based on the model for holding a user

BlackJackWCF

BlackJackWCF.BJService

* Main entrypoint for the Service the only one that uses the DAL and interacts with the data itself

BlackJackWCF.GameWcf

* Class for handling a game object in the service

BlackJackWCF.IBJService

* Wcf Service Interface detailing all possible actions

BlackJackWCF.UserWcf

* Class for handling a user object in the service

BlackJackWCF.WcfServiceCallback

* Wcf Service interface for callbacks

BlackJackWeb – the WebSite part of the project

BlackJackWeb.Default

* The default start page

BlackJackWeb.emptyCallback

* A Class for creating a callback object that does nothing

BlackJackWeb.register

* The register page

BlackJackWeb.Site

* The master page

BlackJackWeb.UserPage

* The user page

GameService - the game manager service used by a client to set up a game

GameService.Card

* Represent the cards

GameService.Client

* Unused (wanted to use it to hide all connection implementation details from the Gui

GameService.Deck

* Represent a deck of cards

GameService.IMessage

* The Wcf Interface used by the game service

GameService.IMessageCallback

* Wcf interface for the callbacks

GameService.Player

* Representing a player in the game server (similar to a userWcf)

GameService.Server

* Implementation of the IMessage interface with functions to allow for easy starting of the server (simple game server)

WinClient – The winforms client for the game

WinClient.emptyCallback

* A Class for creating a callback object that does nothing

WinClient.GameChooser

* Allow to choose a game after login

WinClient.GameScreen

* The main screen of the app for playing and chat

WinClient.Login

* First form, for getting a userWcf object after authenticating

WinClient.Program

* Main entry point for the winform app

**Installation instructions:**

This has been tested only in the Visual studio webDevelopment server, and only in localhost

1. Start the BlackJackWeb project (will start it on the Development server and will start the BlackJackWCF service
2. Download the client zip file
3. Extract the files to any directory.
4. Run the client.exe file

**Known Issues:**

1. For some reason it doesn't work when using internal or external IP addresses while the servers are getting set up they do not receive or send data proably a security issue on my PC.
2. The login window was changed to using a method with a return value which cause it to hang in order to prevent an issue where the thread got errors after the game was quitting.
3. The newline is not appearing in the chat.
4. Code refactoring needed.