**Razz Poker**

***The Poker Game***

**Interim Report – 13/07/2014**

# Rivals - (Group 7)

Group Members:-

13210416 - K.V CHARAKA KAUMUDU KUMARASINGHE

13208177 - K H VITHANAGE SANDARUWAN CHANAKA

13208174 - U GAMAGE YASITH MADUSANKA

13208186 - D.L.P.H SENANAYAKE

13208172 - M.K.CHANUKA DILUSHA

13208351 – E.H WICKRAMA VISHWANATH

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# Introduction

This report provides an overview of our ongoing Project “Razz Poker Game”. This Game facilitates the Multiplayer Up to 7 Players and provides easy user interface to interact. For the Simplicity of the end user, we provide real-time web based environment, because we assume that the user isn’t a technical person to install frameworks, enable / disable ports in the firewall & web based environment is a matter of type in the URL browser.

In order to meet this requirement we used tomcat / glass fish server to run the engine of the game and we choose eclipse to develop the game. Therefore the J2EE plugin is installed to the eclipse to develop the web components.

Every User Get Few Virtual Coins in the beginning and as the user progresses, he/she will increase the virtual coins and in the meantime, every successful game adds a reputation to his/her profile & the top reputed players’ profiles will be displayed on the “Razz Poker” Home Page. Other than the game, we facilitate group chat for user’s entrainment and Forum to discuss various matters and help new users to assist from Old Ones.

Razz Poker Game comes with a control panel for administrators to ensure the stability. Using this control panel, administrators will be able to notify users’ various things such as events / News. For the Users, Razz Game Provides a Video Tutorial and text based document as to how to use the software and get the benefit...

# 2. Specification with work-packages overview

## 2.1 Requirement Specification of the Project

01. Basic features

* Our game must be attractable.
  + We created very attractable interfaces with eye-catching images.
* Game should be built on web based.
  + In order to build a web based game we choose Java Enterprise Edition to build the game.
* Game should have a home screen.
  + Very user-friendly home screen has been built.
* Once a player gives her/his details, It should be stored in a database.
  + We choose SQL Server as the database engine.
* Game should have single player mode and multiple player modes.
  + Each player should be able to connect to the game as a single player or multi player. And each mode can be chosen in the home page.
* In the multi-player mode there should be at least two players.
  + Count the number of players and check whether it’s exceed the minimum and maximum number of players.
* Game is usually played with a maximum of eight players.
  + 1 to 8 players can play the game at the same time.
* Players must be able to create game lobbies.
  + Players can connect with the game and create game lobbies & let their friends to connect to the lobby.
* Communication
  + Each player should be able to communicate inside the game lobby. We use online chat room to link with our game.

02. Game play requirements

* Players hand must not be visible to other players.

Players hand can be seen only by him/herself, players’ privacy should be protected.

* Once the relevant card is clicked, it is shown to the other players.
* If somebody has won a hand she/he will have chips.
* Users can bet according to the Razz rules.
* The person who next to the dealer should bet in the first place in each round.
* Players should be able to give nick names

## 2.2 External Interface Requirements

### 2.2.1 User Interfaces

All interactions with the user will be through a web-based GUI. The GUI will give the user options to login, logout, create a game, create an account, join a game, access help, and exit the game. Once the game is started the GUI will always give the user full view of the current game. The GUI will provide the user with buttons to play his turn, view the scores, exit the game, and access the help. The GUI shall display the current dealer and time remaining for the user to play his turn. There will be status bar which will display error messages to the user. The GUI shall also provide a warning message when the user exits the game. The GUI will also contain a chat window which user can open, minimize, close.

### 2.2.2 Hardware Interfaces

There are no hardware interfaces in the system.

### 2.2.3 Software Interfaces

The server will use a database to maintain login information for the users.

### 2.2.4 Communications Interfaces

The application will use the standard HTTP protocol for communication between the server and the web-based GUI for the game.

## 2.3 Specifications

This web-based (client server model) system requires basic poker game requirements as well as the specific “Razz poker” game rules.

Application should provide above basic requirements and further customization options such as system administration panel in order to control the application system.

The system should use minimum client system requirements and minimum server typical configuration requirements.

The system should satisfy the non-functional requirements such as extendibility, portability, usability, reliability, security, testability, performance and good documentation in order to provide better end user satisfaction for the system.

## 2.1 Basic WBS

Figure - WBS of the system

## 4.2 Work Packages and Deliverables

There are three main work packages.

* Razz Poker Application
* User Guide
* External Forum and Chat room.

**Razz Poker Application**

This sub-system contains two major components, Application Backend and System UI. This provides the most important functionalities of the system.

Application Backend

* *Game core/Engine*

This contains the basic logic of the game play. Process the game rules and provide the results and game play of the system

* *Database Engine*

This provides the storage of the game data and support the game core. Handle the details of the users of the system and allow the admin panel to access the data.

* *User Authorization and Management*

This component handles the user login and management including poker game rooms, no of players etc.

* *Administrator Panel*

This provides the ability to the system administrators to manage the game, change rules, and handle issues and so on.

System UI

* *Command Line*

This is used only for testing of the game core and monitor game flow.

* *GUI*

This is the component that end user interacts with the system. It should validate user inputs and provide better user experience.

**User Guide**

This is the component that provides the details of the game play, its rules and regulations, hints, tips and tricks etc.

We hope to provide text based documentation with detailed graphics and a video tutorial of the game play.

**External forum and Chat room**

At this moment we do not implement chat rooms and forums for the application within the system to users in order to communicate and express ideas and knowledge on the game.

But we hope to provide external resources that can be integrated with our system.

# 3. Implementation Description

## 3.1 Basic Game Design

Application system design should provide clear overview of the entire system that leads to a good implementation of the system. It should cover all the aspects and requirements of the system.

In our approach we basically divide the system to 3 layers which can be clearly identified. Each layer designed to be loosely coupled with other layers that provide better encapsulation and abstraction of the system design.

This should provide the flexibility of adopting the future requirement changes and maintenance as long as the separation between the View, Model, and Controller are done properly.

Layer 1 – Web Interface

Layer 3 – Poker/Game engine

Layer 2 – Game Model

Figure – Layer structure of the system

## 3.2 Client Server Approach

System design is based on client server architecture (web-based approach). This has a thin client that does not require higher performances or resources. Server handles all the heavy duty of the game play.

Communication between client and server is done using standard HTTP protocol as request response calls.

Database design of the system should meet this architecture in order to provide the security and the performance of the system while game engine process the rules of the game.

Database

**Process Data**

Server

Client

Other clients

**Send login, chat message, game play information**

**Feedback**

**Feedback**

**Request**

**Response**

Figure - Client-Server-Database Interaction

## 3.3 Communication between Users

Chat rooms, forums for the players to communicate each other provided by external sources which do not implemented within the application system at this approach.

# 4. Analysis of Success / Failure

## 4.1 Design Issues and Solutions

* Knowledge and experience of each member of the group are not equal so we have to assign design and implementation tasks to the members of the group according to their ability.
* Database design of the system including ER diagram and Object relation mapping requires advance knowledge to finalize.
* Agreement of a common design of the system among the group members does not exactly provide the correct design.
* Work breakdown structure of the system should divide the components and sub systems that can be individually developed and tested.
* Time and recovery of the failures should be managed accordingly to deliver the system at right time.
* Utilization of available resources and dedication is the key solution to the success of the project.

# 5. Team analysis

## 5.1 Assignment of Team Members

|  |  |  |  |
| --- | --- | --- | --- |
| **Component** | **Type**  **(Critical / High Priority)** | **Time** | **Allocated Members** |
| Razz Poker Game | | | |
| Game Core | Critical – high priority | 3 weeks | 13210416, 13208177, 13208174 |
| Database Engine | Critical – high priority | 2 weeks | 13210416, 13208177, 13208174 |
| User Authorization and Management | High Priority | 2 weeks | 13210416, 13208177, 13208174,  13208186 |
| Administrator Panel | N/A | 1 week | 13208177, 13208174,  13208186 |
| Command Line | N/A | N/A | 13210416 |
| GUI | High priority | 2 weeks | 13210416, 13208177, 13208174,  13208186 |
| User Guide | | | |
| Text Based | Critical | 2 weeks | 13208172,  13208351 |
| Video Tutorials |  | 2 weeks | 13208172,  13208351 |
| External forum and Chat room | | | |
| Forum | N/A | - | 13208186,  13208172,  13208351 |
| Chat Room | N/A | - | 13208186,  13208172,  13208351 |

## 5.2 Member Responsibilities

As shown above, the project is mainly divided into three functional categories based on the level of their priority.  
  
1. The Game  
2. The User Guide  
3. The External Forum and Chat room (Optional)  
  
Members are assigned to one or more categories considering their talents and the personal preference.  
  
The Razz Poker Game  
  
This is the most critical division of the project. The members assigned to this category is responsible for the core functionalities of the game and the overall look and feel of the final application.  
Their checklist includes,  
  
1. The design and development of all the core modules of the program.  
2. Handling all the database operations.  
3. Creating access to users and managing user operations.  
4. Implementation of the administrator panel.  
5. Handling command line operations.  
6. Design and implementation of the graphical user interface.  
  
User Guide  
  
The main goal of this division is to enhance the quality of the application by creating the opportunity for the new users to experience a more friendly and interactive environment.  
  
The members assigned to this category is responsible for the proper design and implementation of informative details which are to be accessed by users to gain knowledge about the game and how to use the application properly.   
  
The team is required to design text based interactive menus to show basic step by step directions on how the game is played and how to perform each action of the game.  
They are also responsible for creating video tutorials for the beginners explaining the idea behind the Razz poker and the rules of the game  
  
  
External Forum And Chat Room  
  
This is considered as an optional task in the scope of the project.   
  
The main purpose of the external forum is to create a web-based online community for the game in order to receive feedback and provide the atmosphere for users to exchange ideas and request developer support for technical issues.  
  
The in-game chat room is supposed to provide a more interactive and entertaining atmosphere for the gamers by letting them chat with each other while playing.

# 6. Gantt chart

This Gantt chart describes our project schedule and time line

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **WBS - Component** | **Weeks** | | | | | | **Comments** |
| 1 | 2 | 3 | 4 | 5 | 6 |
|  | | | | | | | |
| Game Core |  |  |  |  |  |  | 50 % completed |
| Database Engine |  |  |  |  |  |  | 75 % completed |
| User Auth & Mgt |  |  |  |  |  |  | 10 % completed |
| Admin Panel |  |  |  |  |  |  | 0 % completed |
| UI |  |  |  |  |  |  | 25 % completed |
|  | | | | | | | |
| Txt User Guide |  |  |  |  |  |  | - |
| Video Tutorial |  |  |  |  |  |  | - |
|  | | | | | | | |
| Forum |  |  |  |  |  |  | - |
| Chat Room |  |  |  |  |  |  | - |

## 5.1 Weekly Meetings

* We prepare meetings at least twice a week in order to discuss the progress and issues of the system.
* Each week we discuss about a new topic, and share our knowledge among the group to archive our goals.