Tri Peak Solitaire

Design Proposal

11/16/2015

Marcus Klein

Yubraj Budhathoki

Prepared for

Software Engineering I

Instructor: Mrs. Kussmann

McNeese State University

**Project Name**

Tri-Peaks Solitaire

**Project URL**

www.github.com/mklein530/tripeaks

**Project Scope**

The goal of this project is to produce a fully functional variation of solitaire called Tri-Peaks. Deliverables include:

* HTML and CSS files for the styling of the page, creating a login and registration form,
* Java script files for the classes/objects and logic,
* a database file to store user information like username, password, highest score, current score etc.
* PHP files for interacting the user information to the database.

**Date**

November 16, 2015

**Project Background and Description**

Tri-Peaks Solitaire is a card game where 28 cards from one deck are arranged in 3 pyramids of 4 rows, with the bottom row being 10 cards face up, the next row being 9 cards face down, the next row being 6 cards face down, and 3 cards face down. The rest of the cards (24) are placed in a stack with the top card being flipped over next to the stack. The player’s goal is to move all the cards from the table to the flipped over stack, one row at a time. After each row of cards is successfully transferred to the stack of played cards, the next row is shown face up. In order for the card to be eligible to move from the row to the stack, the card must either be of a value one less than or one greater than the top of the stack.

The player should have the option to replay the current game or start a new game. Score should be kept, where the first card matched is worth 100 points, and each consecutive play is worth 200 points. Each game will run for 2 minutes and 30 seconds. There will be a bonus score, starting at 20000 and decrementing by 200 each second.

A Microsoft Access database shall be implemented to hold the player’s scores and displayed following each game.

Cards should appear as follows:

O O O

O O O O O O

O O O O O O O O O

A A A A A A A A A A

A is a face-up card

O is a face-down card

(Wikipedia)

**Project Scope Overview**

A graphical user interface, including a table and cards for playing the game, and the underlying logic allowing the game to be fully functional.

**Projected Schedule**

Graphical user interface – October 3, 2015

Game logic – October 3, 2015

Debugging and Optimization – October 3, 2015

Database – October 21, 2015

Registration and login – October 27, 2015

Documentation – Done in conjunction with each task

Powerpoint – October 31, 2015

**Cost Estimate**

120 hours

**Deliverables**

Documentation – Marcus and Yubraj, at time of each task

Design – Marcus and Yubraj, September 24, 2015

HTML files:

Index.html – September 24, 2015

Javascript files :

Cards.js – September 25, 2015

DeckOfCards.js – September 25, 2015

Game.js – September 26, 2015

PHP files:

Scores.php

Login.php

Registration.php

Forgot.php

Database file:

userdata.accdb

**Future Tasks**

Refactor and add other features.

**Affected Parties**

Marcus Klein, Yubraj Budhathoki, Kay Kussmann

**Team Profile:**

Marcus klein

Qualifications: Design, Programming, Error checking, Team management.

Yubraj Budhathoki

Qualifications: Design, Presentation, Organizing, Database management, Documentation.

**Potential users:**

Anybody who has a basic idea how to use a computer.

**Plan of work:**

Marcus Klein:

* Standard Tripeak game
* New game button
* Replay button
* Powerpoint
* documentation

Yubraj Budhathoki

* bonus points
* login form
* registration form
* score board
* database
* powerpoint
* documentation

**Contact Information**

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Kay Kussmann = [kkussman@mcneese.edu](mailto:kkussman@mcneese.edu)

**Approval and Authority to Proceed Section**

Marcus Klein \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Yubraj Budhathoki \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Kay Kussmann \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_