Systems Modeling - Project Backgammon

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Introduction & background

The aim of this document is to provide an overview of the development of a working implementation of a multi-player Backgammon game created for the Systems Modeling course in fall 2012. The team consists of three Computer Science MSc students: Karl Potisepp, Siim Viiklaid and Karl Kilgi.

Objectives

The objectives of the project are to create a working implementation along with source code, and also provide documentation in the form of the following items:

- class diagram
- storyboard
- project log
- simulated customer discussion along with 3-5 proposed features
- a guide through the project

Scope

The scope of this project is defined as a interactive game of Backgammon that can be played by two human players on the same computer. The following features are included in the scope:

- starting the game
- choosing your move based on the rules of the game and the dice roll
- doubling the stake

To deliver the finished application within the deadline, we decided to forego complicated client-server implementations and also capabilities to play more than one game during the runtime of the application.

Methodologies & Strategy

Our strategy was to divide the workload as follows: 1 person dealing with all matters pertaining to documentation and 2 persons working on implementing the code and analysis. Due to the small scale of the project, we chose to create a preliminary class diagram along with a storyboard, then create the application and later add adjust the diagram to reflect any changes that were found to be necessary during the coding phase.

Issues & Risks

As the project is of extremely small scale and with clear requirements, there are no risks besides force majeure to deal with besides getting everything ready for the deadline. '

Schedule of Delivery

Everything included in the objectives of the project will be delivered by midnight 12.10.2012.

Appendix 1 - Project log

Date	Activity
07.10.2012	First analysis session.
08.10.2012	Distribution of tasks. First programming session.
10.10.2012	Documentation session.
12.10.2012	Final preparation for delivery and delivery.

Appendix 2 - Simulated customer discussion

Customer:	Hello, how are you? I am here to discuss the project.
Analyst:	Hello, I'm fine thanks, how are you? We've been waiting for you all day, so let's get started. Can you show me what you want?
Customer:	Yes! I've been craving for something for so long! Can you help satisfy me?
Analyst:	Of course, but before we really get off, you must tell me about what it is that you want. Once I know, I can tell you if we can make your dreams a reality.
Customer:	I want a multi-player Backgammon game to play on my computer with my friends. You can find the rules on Wikipedia.
Analyst:	Do you want to play online with your friends over the internet or a local area connection?
Customer:	No, it is fine if we just need a single computer to play with each other.
Analyst:	Aside from making the game behave according to the rules on Wikipedia, do you want anything else?
Customer:	Is it very hard to have a way to play with myself against the computer?
Analyst:	That's probably very difficult if you are an above-average player. It would take a lot of time and be expensive to implement.
Customer:	Oh no, I would like to get to play with my friends as soon as possible, so at first I will go without this feature. I also wanted a high score table, is this also a difficult thing?
Analyst:	Not as much, but this requires some sort of database and also some way to type in the names of the players, so it will still make things more complex.
Customer:	Well that is not necessary, so I will just choose the basic game as it is, thank you.

Appendix 3 - Suggested features

- online play
- a single-player mode with computer as opponent
- high score table
- tournament mode for more than 2 players