Project Overview Document – Group 8

Introduction
The idea of the project is to play Pictionary on the Internet. Its a multiplayer game.

The users
The users are both men and women of the ages 10 and up. You do not really need to be skilled at Pictionary or computers, it is quite simple. The game is for entartainment and also for lonely people who want to play multiplayer games and to find some friends. This is the main use of the system.

Possible scenarios & personas:

Primary persona:

Mike is a 42-years old man who works as a programmer at IBM, comes home one Wednesday evening. He eats his TV-dinner alone and watches a little TV. He does not have many friends and spends his evenings most by himself. He recently discovered an Internet-based game called "Pictionary on the web". He now spends his evenings on the website, playing Pictionary on the Internet and meeting new friends. All users that are members also have a small profile-page with some facts about themselves. Mike has gotten to know some of the players, and the players always play together in a team. Playing "Pictionary on the web" is a way to entertain him and decrease the feeling of loneliness.

When it is time for Mike to start a game, he begins by starting his preferred web browser Firefox and locates the game site among his favorites. He signs on using his username and password. He locates his recently found friends on the "*Friends*" list and then joins the same room by clicking the button "*Join Room*". For a game to start, it needs a minimum of two players in each team. Mike really likes the voice function, which makes him able to talk to his teammates and his recently discovered friends.

A couple of hours later when it is time to go to bed, he is able to sign out so there is no need to worry that his friends thinks he is still online.

Secondary persona:

Lisa is a 16-years old girl who likes spending time with her friends and shopping. When she has some time to kill between classes, she and her friends spends time on school computers. Her friends like communities, but Lisa is not at all interested. She likes drawing and is often on "Pictionary on the web". She is very good at drawing and really likes when other players guess on her drawings. She is not interested in interacting with other players, she just want to entertain herself for a while, that is why she plays anonymously on the site, so there is no need to fill in any forms and upload any picture. She begins by starting up the one and only browser that she knows off, Microsoft Internet Explorer on the school computer. She remembers the Internet address for "Pictionary on the web" from an Internet

Since she really like to show off her drawing skills, she chooses to join the room with the most players, by clicking on the appropriate room located in the "*Game Rooms*"-list and then on the "*Join*"-button. After joining a particular game room she makes sure that the sound is quickly turned off, so she does not need to listen to any teammates or other players from the same room, which

could disturb others around her. The game starts when the room creator chooses to start the game. Lisa tries to guess the current word while she awaits for her turn to draw. When it is time for her to draw, the gray shaded drawing buttons will be available on the left side of the drawing-area. Available drawing-buttons are for example lines, circles, fill function and be able to choose colors, thickness, patterns, etc.

The environment where Lisa prefers to play is at public places such as, computer rooms at school and libraries. Playing at home is definitely not an option for her, since she has better things to do at home.

When Lisa decides to quit she can easily turn off her web browser since she is not logged on as a registered user.

Game enviroment
The enviroment when playing the game is at home preferably. The game has several audio-modes and is very loud, therefore it is not suitable to play in public, unless you do not turn off the sound.

The scope of the game system.
It is displayed by the in/out-list below.

Topic	In	Out
Play Pictionary	x	
Save users	x	
Save pictures for print	x	
any non-software parts of the system		x
Chat-function	x	
AI		x
Database	x	
Optional microphone	x	
Rule definition	x	
Possibility to only Watch a game in progress Without playing		x
Animated graphics (optional)	x	

Main factors that need to be taken in account when building the system

- When a player is drawing chat and use of the microphone for that player is disabled.
- One can only guess the correct word by typing it in the chat window.
- Every guess is matched against the correct word. To score a point it has to be completely correct. Use of upper or lower case is ignored. If it is partly correct, or misspelled you get a "close"-message.
- During the game there is a team chat, where you can chat with your teammembers.
- If your answer is correct, you may proceed in the game by rolling a dice and move as many steps as shown by the dice.
- The team members take turn drawing. You can not choose the one that draws.
- The board contains a path for the teams to follow. The winner of the game is the team that gets to the finish first and succesfully draws and guesses the correct word.

- You have one minute to successfully guess what your team member is drawing. If you are unable to guess correctly it is the opposing teams turn to draw.
- You have to be at least four people to play.
- You have to be at least two people on each team. There is only two teams in the game session. The teams have to be as even as possible. If you for example are 7 people playing, the teams must consist of 3 and 4 players.
- You can click on a persons name to see his/hers profile provided that the person is a member.
- Optional: There is possible to use a microphone, to increase the team spirit.
- While drawing it is possible to choose colors
- A complete instruction of the game will be available to consult if questions arise before or during playing.

Main parts of the software:

Create website

From your browser you reach the website for the game. At the startpage you can register as a user or login as a guest. You can view the game rules and edit your profile.
- rules of the game
- register user
- login as users/guest
- profile page

Create database

The database will contain user information such as username, password, profileID, ranking. The database will also contain all the guessing words used in the game.
- users
- words

Create server

The server contains most of the functionality. The server listens for connections from clients. When a client connects it is put in a client thread and then the server continue to listen for connections.
- recieve connections
- create rules for the game
  This part contains all game rules used by the server.
- create canvas and drawing functions
  We will use UDP/IP to send all lines drawn etc to the other clients so that they can see what is beeing drawn.
- create chat/team chat
  The game will have two chats. A team chat and a chat for all players in the game room.
- create graphic design
  Graphic design for the board of the game, dice, buttons etc.
- create start window
  The start window is where you arrive after you have logged in. Here you can see all available game rooms and if you are a member you can see all of your friends that are logged in.

Technologies & Risk

Technologies

The technologies used will be Java (Java-applet or Java Web Start) MySQL (or equivalent) and HTML. The game and the database will be on a server connected to the Internet. And you access the game by entering a webpage.

Risks

Lack of programming skills.
Size of sofware is underestimated.
The time required to develop the software is underestimated.
Other courses steal time and focus from the software developing process.
Group members unavailable or sick.
Group members lack of motivation.