ICE HOCKEY

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Guide: Ms. Sruthimol Kurian

1. Project Overview?

Ice Hockey is an online multi-player game, intended to play in smart phones.

The game can be classified into arcade and sports category.

2. To what extend the system is proposed for?

The gameplay consist of 2 players as opponents. They are connected over internet. There will be a hockey ball (hockey puck), can be controlled by the gestures of the players. The aim of the game is to score more goals than the opponent. When one tries to score the goal, the other can deflect the ball from being a goal. The player who reaches 15 goals first will win the match.

3. Specify the Viewers/Public which is to be involved in the System?

General public who are interested to play games for leisure, entertainment, relief etc...

4. List the Modules included in your System?

<u>Match making</u>: Match making is the process of finding and allocating players for the game. This will be based on the skills and ranking of the player.

<u>Core gaming module</u>: This module consists of the actual gaming model, real-time synchronization of players, scoring calculations, etc...

<u>History and leader-board</u>: Processing and conservation of gaming history and results to facilitate leader-board and skill based match making

5. Identify the users in your project?

General public

6. Who owns the system?

Project owner

7. System is related to which firm/industry/organization?

Gaming, Entertainment

8. Details of person that you have contacted for data collection?

Mr. John Dennis

Game Developer,

DynamicNext Games,

Cochin, Kerala

- 9. Questionnaire to collect details about the project?
 - 1. Do you think of game design as similar to other forms of design (industrial, graphic, etc.)?

It's a lot like architecture. Games are spaces that contain many possibilities; we can only design the context for interesting things to happen.

2. Should you design for yourself, or should you design for your audience?

Audience. Games have a significant usability component. It's important to consider a range of motor and cognitive ability. Aesthetically, I'm a lost cause. My taste is so messed up! I like bad things. My compromise is I usually design with a specific person in mind.

3. What are the essential tools for making games?

The ubiquity of game engines like Unity, GameMaker, and Unreal speaks for itself. They allow for quick and easy prototyping of ideas but are also robust and powerful enough to provide a foundation for building a full final product.

4. What's the most important game mechanic of the past 10 years?

Free-to-play monetization is definitely the one that has impacted our industry the most.

5. How do you describe game design to people who don't know what it is?

Game design is essentially defining the rules of an interactive world. Many people see it as mysterious and intangible, and often don't realize that real people craft every facet of the games they enjoy. For the completely uninitiated, I like to describe games as a young medium, similar to cinema a century ago.

6. How do we handle and synchronize the game play (like walking, gun fire) of multiple players paying same game?

Multiplier games work on a technology called 'web socket'. It is a protocol like HTTP based on TCP. Unlike HTTP it provides fast two-way communication for both client and server. This protocol is capable of transmitting messages to multiple clients to the server at the same time. So this technology is user to synchronize the game play of multiple players.

7. What happens if any player quits from a currently playing game? Will it break the entire game play of another players?

In most of the multiplayer games, the game logic is implemented on the server so if any client is disconnected from the server, it won't affect the other players unlike in peer-peer game development.

8. One complaint regarding games are the level of addiction and mental problems caused by the games to the players (especially in children). So when developing games we want to consider this problem too. Right?

Well, not actually. Our intension of making game is to entertain people. It is the mentality of people to use it in both ways. So we just concentrate in building good games, the rest is in the games of users.

9. Unlike other software independently developed games do not have any institution or business to buy the product. So what is the revenue model for a game?

Until few years before the main revenue model of games was the price for buying the games. But now-a-days the developers make money by in-app purchases. That means the game is free to download and play, but the payers want to spend money for buying power ups, cloths and other such resources.

10. What are the different roles of people that we should cover in game development?

<u>Designer</u>: A game designer is a person who designs gameplay, conceiving and designing the rules and structure of a game.

<u>Artist</u>: A game artist is a visual artist who creates video game art. The artist's job may be 2D oriented or 3D oriented. 2D artists may produce concept art, sprites, textures, environmental backdrops or terrain images, and user interface.3D artists may produce models or meshes, animation, 3D environment, and cinematics. Artists sometimes occupy both roles.

<u>Programmer</u>: A game programmer is a software engineer who primarily develops video games or related software (such as game development tools). The game's codebase development is handled by programmers

Level designer: A level designer is a person who creates levels, challenges or missions for computer and/or video games using a specific set of programs. These programs may be commonly available commercial 3D or 2D design

programs, or specially designed and tailored level editors made for a specific game.

<u>Sound engineers</u>: Sound engineers are technical professionals responsible for sound effects and sound positioning. They sometimes oversee voice acting and other sound asset creation. Composers who create a game's musical score also comprise a game's sound team, though often this work is outsourced.