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# AN INTERACTIVE WEB BASED GAME

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***Abstract:*** This project aims to develop an internet web browser based strategy game application. Strategy games engage the player for a long time and improve cognitive skills. Various web platform games are available on the internet, and our game is also inspired from them. We have tried to keep the user interaction simple and easy to understand as one has not to go many steps to accomplish a task in the game. A thorough study has been done and results from various paper related to web game user interaction has been included in our game. This is just the first model of the game, various possibilities exist for the future where we can extend the game. We have also planned to develop this application into an internet business where upgraded users have to pay real money to play the game and we'll provide attractive incentives to the winner of the game. This game will also be integrated with various social networking websites such as Facebook, so that we can amass a large number of players across the world. The main purpose of the game is to provide entertainment along with improving different cognitive skills. Such games attract a lot of consumers, who are eager to test their planning and decision based skills. Target users of the game are mainly school and college students along with interested adults.

**Keywords: Games, Automation, Image Recognition, Image Resolution, Mobile communication, online game, Strategy.**

## I. INTRODUCTION

An online browser game is a game which is played on internet using browsers. These browser games run using standard web technologies or browser plug-ins. such games usually involves use of standard web technologies as a front end and other technologies as a back end. Browser games include all video game genres and can be single player or multiplayer. Browser games are also portable and can be played on multiple different devices, web browsers and operating systems. Standard web technologies such as HTML, CSS, PHP, and JavaScript can be used to make browser games, but these have had limited success because of issue with browser compatibility and quality. These technologies collectively termed dynamic HTML, allow for games that can be run in all standard compliant browser. As we advance in information technology, number of internet users are increasing day by day. In last few years, this number has increased significantly as people are being aware of the use of internet. Internet users like to gain information as well as keep them entertained by listening online music, playing online games, etc. A large section of the internet users like to play variety of online games. These games do not require any special requirement, any user can play such games using their internet browser. Internet browser games have an advantage over Standalone games as they do not require any setup or special requirement on the players system. Browser games are easy to access and made short to provide entertainment and challenge to the user in as easy way as possible. There is a large variation present in online games. Few examples can be shooting games, mathematical games, action games, puzzle games, strategy games, etc. But most of these games are developed by foreign countries' developers. The lack of Indian based online games which lead us to take this project of developing an Indian theme game. Games to which users can relate, are more attractive and people like to play such games often. This project aims to fulfill such gap by developing an Indian theme based online game.

## II. LITERATURE REVIEW

Earliest online gaming started around 1969. In 1970s and 80s when Dial up bulletin boards became popular it gained more attention. At that this Dial up method was used by players to play online games. Commercial online service was introduced in 1980s and interactive online games were introduced after that. In the 1990s, with the introduction of Java and Flash technology, several online games were introduced based on these technologies. This gave a great boom to the online games.

We started the project by referring to various online games and research papers on interaction design and game development. The results of the study is discussed as below.

**[1] A brief timeline of online games**

1969:

PLATO Internet Service - "Space War" game.

By 1972, the game gained popularity of more than 1000 players that the game could host.

1979-1980:

Essex University, U.K. hosted the first "MUD" online game on its system.

1982-1983:

Kesmai Corporation launched an ASCII role-playing game “Mega Wars” in 1983.

1994-1995:

Sony released its PlayStation and Nintendo 64 was launched.

1997:

Sony sold its 20 millionth PlayStation.

1998-2008:

Sony's PlayStation, Microsoft's X-box Live, and the Japanese company Nintendo create some of the world's most popular online games that attract an unprecedented number of new users to the world of online gaming.

**[2] The advantages of online gaming**

Apart from the entertainment purpose that games are intended to provide. There are other benefits also which such games serve. Few such benefits are described below.

- **REALISTIC GAMING EXPERIENCE**

  In many online games, user plays against humans, rather than a computer, which provides more realistic gaming experience.

- **EDUCATIONAL BENEFITS**

  Several online games are there which focus on education. Playing this game provides pleasure as well as user learns in a fun way.

  E.g. Mathematical games, Physics games, online quizzes.

- **RELAXATION**

Games are a great source of entertainment. People when stressed usually play their favorite games in order to escape from stress and to keep them relaxed.

**[3] Features of a good online game**

There is a large variation present in online games. Few examples can be shooting games, mathematical games, action games, puzzle games, strategy games, etc. But most of these games are developed by foreign countries’ developers. Lack of Indian based games lead to the idea of this project. This project aims to fulfill such gap by developing an Indian theme based online game.

A good online game in one which engages users for a long time without boredom. According to a web article, following are the features of a good online game:

- A compelling and original concept
- Player support and community
- Great graphics and environmental diversity
- Good customer service

- Fun gameplay
- Add-on and mod support
- Built-in player-game matching service
- Content additions and refinements
- Ease of player interaction
- Accessibility
- Developer support of player feedback
- Control of cheating
- Challenge

A good game should pose a challenge to the users to think or react spontaneously. People like to solve challenging problems and are engaged in such activities for a long time. By accomplishing the task, user feel a sense of success. The overall look and feel of the game should fascinate the users. Look of the game should be interesting and not boring. The feel of the game includes graphics, presentation of the game.

## III. METHODLOGY

**Existing System:**

The first ever video games that existed such as NIMROD (1951), and Spacewar! (1962) were developed for one or two players sitting at a single system. Later in the 1970s, packet based computer technology began to develop. These LANs and WANs allowed for network based online games, where the games created and received network packets. Systems connected across LANs or the Internet could run games with each other in peer to peer or client server models.

**Proposed System:**

In this system, we analyzed various available games and picked interactive game to be our choice. Various strategy games are available on internet, among them, one is business strategy game, so we chose to develop an Indian theme based business strategy game commonly known as monopoly. At the end of this project we aim to achieve following objectives:

- To develop the user interface of the game.
- To integrate user interaction in it.
- To develop and manage the back end of the game.
- To integrate game with social networking websites.

## IV. DESIGN AND IMPLEMENTATION

We have divided the whole process of game development into broad categories as depicted in Figure.1

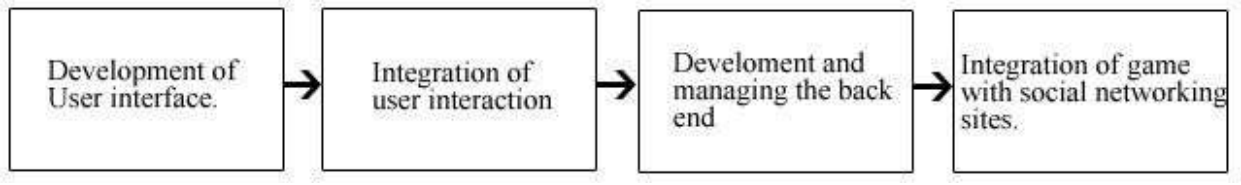


**Figure 1:** Steps in developing the application

## V. CONCLUSION

We started this project with the study of various available games on the internet and various papers related to interaction design and game development. Thus we arrived to our problem statement of developing an Indian theme based web browser game.

Among various interfaces proposed, we arrived at the final interface by taking users surveys based on rating to each interface. After designing the interface, we started to make prototype of the game using web programming language (HTML, CSS, JavaScript, and JQuery).

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