



# Fun with Pixels : A Web Game

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**Abstract:** Internet searching has become the latest craze among teenagers and the youth. Communication through social media is the go of the day. For the reason and no reason, we are slaves to the internet. An Online game is video game that is either partially or primarily played through the internet or any other computer network available. Online games are ubiquitous on modern gaming platforms, including PCs, Consoles and mobile device. The game we made is very interesting and interacting for the users, so the user will not be bored. This game is very user-friendly, which can be used by anyone. Our aim is to make user happy and stress-free. The languages used in this project are HTML, CSS, Javascript(JS), php, My SQL.

## I. INTRODUCTION

As we all know that now a days online gaming is becoming prominent all over the world. Unfortunately, it also comes with some risks. One of the benefits of online gaming is that you can access games online so long as there is an internet connection. Annual research conducted by OFCOM shows that gaming is still one of the top activities enjoyed by 5–16 year-olds online, with many of them gaming via mobile devices and going online using their game console. Some games are accessed through unique website hosting hundreds of different games. So, the game which we are introducing is an online web game. This game is free of charge. In our game we have stored data of registration form in a database. If user wants to play game after some time then user have to login in the game.

While developing this project we have used HTML, CSS, Javascript(JS), php and My SQL for the interactive game based on pixel fun. In this section we have introduced about some major features and introduction of the front-end and back-end software's used in this project.

**HTML-** HTML (HyperText Markup Language) is the code that is used to structure a web page and its content. For example, content could be structured within a set of paragraphs, a list of bulleted points, or using images and data tables. HTML is a language that defines structure of our content. HTML consists of a series of elements, which you use to enclose, or wrap, different parts of the content to make it appear a certain way, or act a certain way. The enclosing tags, can make a word or image hyperlink to somewhere else, can italicize words, can make the font bigger or smaller, and so on.

**CSS-** Cascading Style Sheets (CSS) is a stylesheet language used to describe the presentation of a document written in HTML or XML (including XML dialects such as SVG, MathML or XHTML). CSS describes how elements should be rendered on screen, on paper, in speech, or on other media. CSS is among the core languages of the open web and is standardized across Web browsers according to W3C specification. Previously, development of various parts of CSS specification was done synchronously, which allowed versioning of the latest recommendations. You might have heard about CSS1, CSS2.1, CSS3. However, CSS4 has never become an official version. From CSS3, the scope of the specification increased significantly and the progress on different CSS modules started to differ so much, that it became more effective to develop and release recommendations separately per module. Instead of versioning the CSS specification, W3C now periodically takes a snapshot of the latest stable state of the CSS specification.

**JavaScript (JS)-** JavaScript is a text-based programming language used both on the client-side and server-side that allows you to make web pages interactive. Where HTML and CSS are languages that give structure and style to web pages, JavaScript gives web pages interactive elements that engage a user. Common examples of JavaScript that you might use every day include the search box on Amazon, a news recap video embedded on The New York Times, or refreshing your Twitter feed. Incorporating javascript improves the user experience of the web page by converting it from a static page into an interactive one. JavaScript is mainly used for web-based applications and web browsers. But JavaScript is also used beyond the Web in software, servers and embedded hardware controls.

**PHP-** PHP started out as a small opensource project that evolved as more and more people found out how useful it was. Rasmus Lerdorf unleashed the first version of PHP way back in 1994. PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites. It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix,

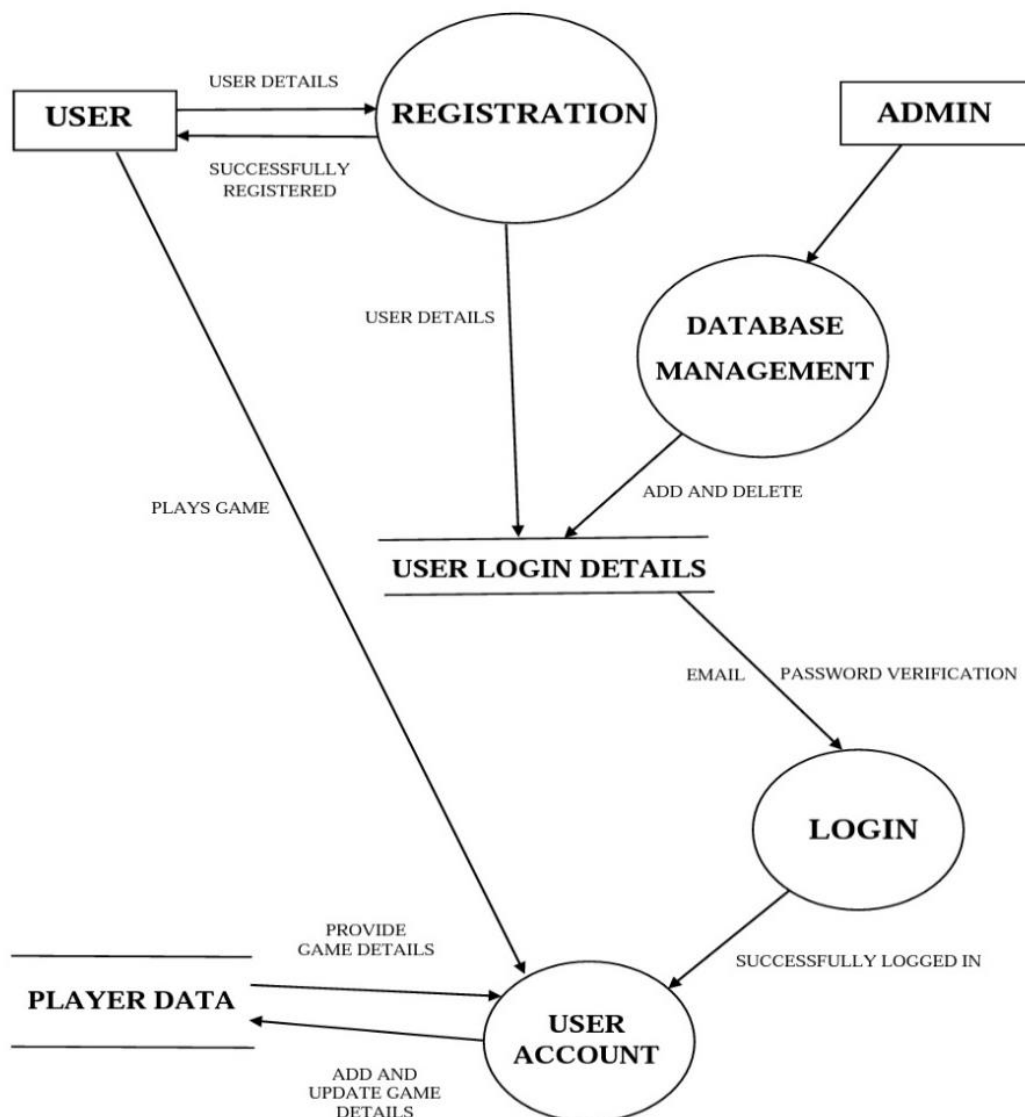


and Microsoft SQL Server. PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time.

**MySQL-** MySQL is a system that helps store and manage data efficiently. Database generally stores data in a structured fashion. It is written in C and C++, and it has been tested with a variety of compilers to check for bugs and inconsistencies. MySQL is open-source, which means this software can be downloaded, used and modified by anyone. It is free-to-use and easy-to-understand. The source code of MySQL can be studied, and changed based on the requirements. It uses GPL, i.e. GNU General Public license which defines rules and regulations regarding what can and can't be done using the application.

**II. METHODOLOGY**

First of all user has to register himself by signing up in the game then he will be able to login. After logging in, you have to select the one of the levels – easy, medium and hard and then you will be able to play the game. You can play the game by arrow keys on your keyboard. Fig.1 shows the flow and direction of information in the project.



**Fig. 1: Flow of information in the game portal**



Figure 2 shows the steps involved in the project during the game. Firstly, user will register himself in the portal then he can login for to move further. After logging in, user have to select the anyone of the difficulty levels – easy, medium or hard, then only user will be able to enjoy the game.

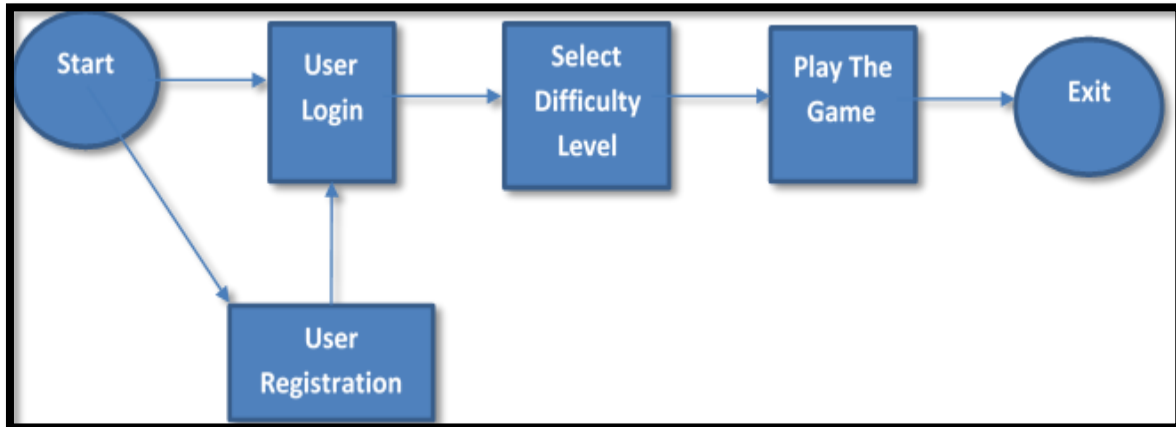


Fig. 2 : Step by step process to play game

The movement in the directions of the pixels will be controlled by arrow keys available on the keyboard. After playing the game user can logout from his account.

### III. RESULTS AND DISCUSSION

The Registration form requires name of the user, contact of user and user has to create password. For Registration we have use HTML for the structure of the registration page, CSS for beautify the page and JavaScript. And for storing data in database, we have used php and My SQL. Figure 3 shows the home page of the portal from where a user can register himself to login and enjoy the game.

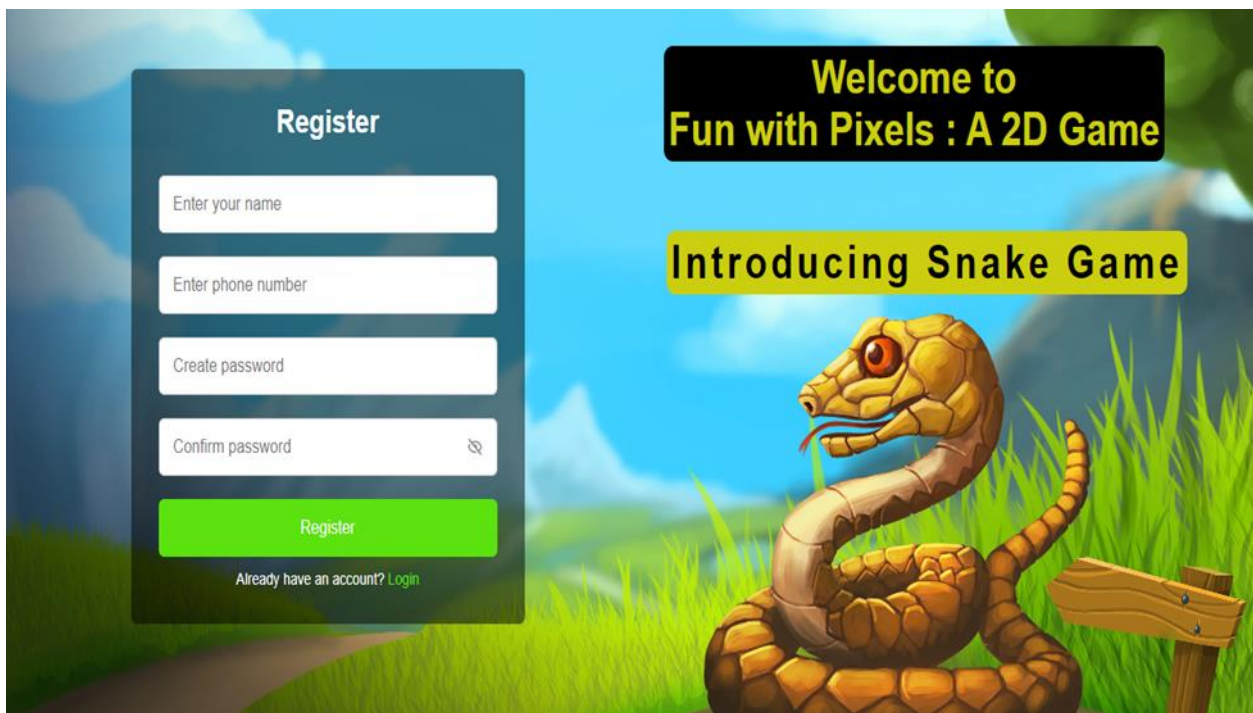


Fig. 3: Registration Page



First of all user will see a registration page. Then the user has to register to enter in the game. After registering user will enter in the game, there will be three level easy, medium and hard. User has to select one then game will start. There is no need to register again. After completing one time registration process the user can login to the game by simply entering his/her phone no. as username and password created by the user during registration. Figure 4 shows the appearance of the login page.

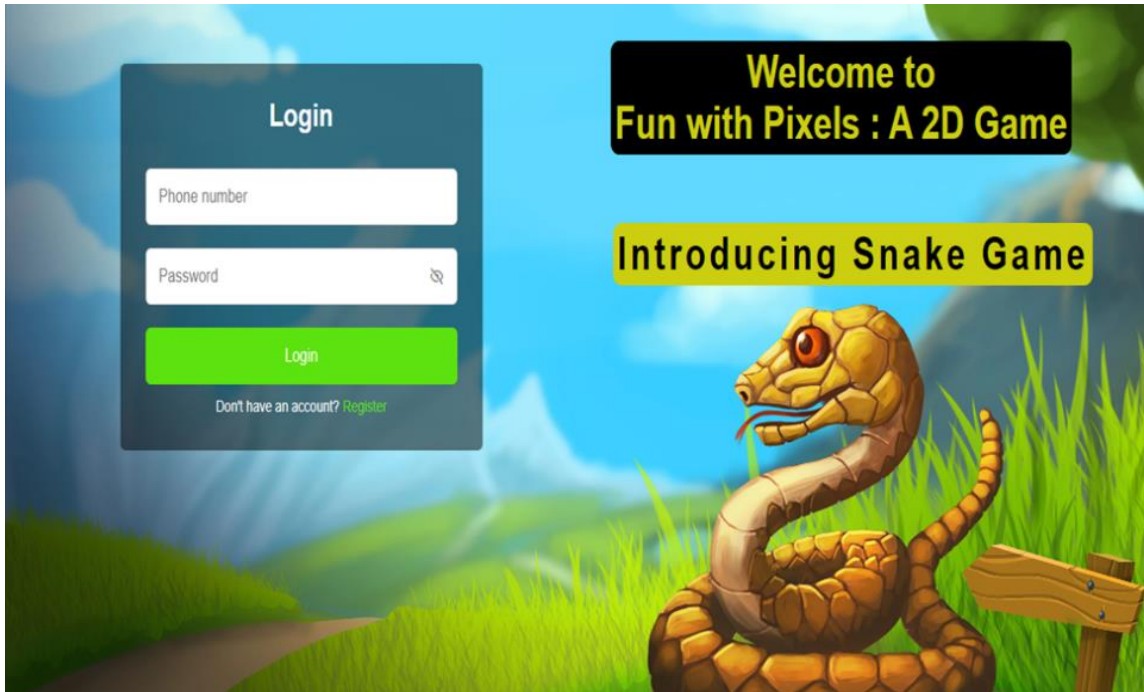


Fig. 4: User Login Page

After inserting phone no. and password the user will be able to play game after verification of login credentials from the data which is stored in database. Figure 5 shows the appearance of the actual game page from where the user can select the difficulty level by selecting any one of the three buttons available on the left side of the page.

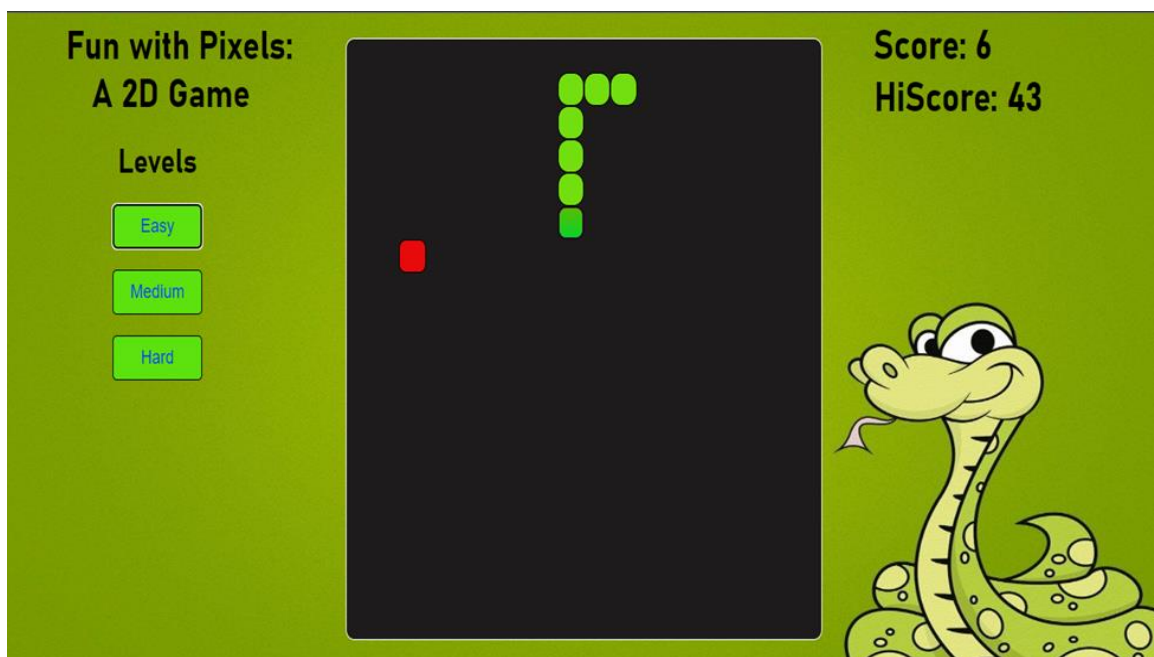


Fig. 5: Actual Game Page



#### IV. CONCLUSION

In this project we have developed an interactive and interesting game based on pixels. For designing the game, we have used HTML, CSS and JavaScript, which makes our game interactive. Here again HTML is used for the structure of the game, CSS is used to beautify the game and JavaScript is used for implementing various validations and calculations etc. For back-end data storage we have used MYSQL that stores the login details and scores achieved by the user each time he interacts with the game. The user can also view the highest score achieved by someone in the game that helps the user to break the record of high score and to build a new high score in his name. Finally, we can say that this project has completed its hypothesis to create fun for users.

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#### BIOGRAPHY



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