Parallex Website

## MINI PROJECT – I SYNOPSIS



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# **ACKNOWLEDGEMENT**

It gives us a great sense of pleasure to present the synopsis of the B.Tech mini project undertaken during B.Tech III Year. This project is going to be an acknowledgement to the inspiration, drive and technical assistance will be contributed to it by many individuals. We owe special debt of gratitude to Md. Farmanul Haque, Technical Trainer , for providing us with an encouraging platform to develop this project, which thus helped us in shaping our abilities towards a constructive goal and for his constant support and guidance to our work.

His sincerity, thoroughness and perseverance has been a constant source of inspiration for us. We believe that he will shower us with all his extensively experienced ideas and insightful comments at different stages of the project & also taught us about the latest industry-oriented technologies. We also do not like miss the opportunity to acknowledge the contribution of all faculty members of the department for their kind guidance and co-operation.

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## ABSTRACT

Parallax scrolling is becoming an increasingly popular strategy in web design. This scrolling technique creates the illusion of depth on a webpage by making the background images move slower than the foreground images. In addition to its ability to engage users with a website, advocates of parallax scrolling claim that it improves user experience. Researchers attribute this pleasurable user experience to the fulfillment of the following variables: usability, satisfaction, enjoyment, fun, and visual appeal. We hypothesized that parallax scrolling would positively influence each of these five variables and subsequently the overall user experience. Eighty-six individuals from a large Midwestern university participated in the research. One group of participants (N = 43) interacted with the parallax scrolling website, whereas the second group (N = 43) interacted with the non-parallax scrolling website. An independent samples t-test revealed significant differences between the two groups in regards to perceived fun. Participants believed that the parallax scrolling website was more fun than the non-parallax scrolling website. The results of the study also showed parallax scrolling to be more effective when used in a hedonic and fun context. In spite of these benefits two of the participants suffered motion sickness and experienced significant usability issues while interacting with the parallax scrolling website. As a result, this potential risk to participants raises some ethical issues that UX practitioners and web designers should consider when planning to implement parallax scrolling.

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# INTRODUCTION

Over the past few years, the field of human-computer interaction (HCI) has seen a shift of focus from product utility to the affective experience users have when interacting with a product. This relationship, which has been dubbed “user experience” (UX), has evolved into a core principle of design and product development. Proponents of UX regard it essential for the success of any product (Kujala, Roto, Väänänen-Vainio-Mattila, Karapanos, & Sinnelä, 2011). Garrett (2006) proposed UX as an instrument for creating customer loyalty and thus should be the objective of every retail product. Taking this into account, product designers have gone to great lengths in the design of their products to ensure a pleasurable UX. Today, parallax scrolling (PS) is one such design strategy employed by designers in an effort to create a great UX for their website visitors.

At the time of this writing, a quick search on Google for the term “parallax scrolling websites” yielded over two hundred thousand search results showing websites currently exploiting this technique to enhance the appearance and interactivity of their website and engage their visitors. The PS effect allows multiple backgrounds in a webpage to move simultaneously at different speeds, thereby creating the illusion of depth. In addition to its aesthetic appeal, PS offers web designers an opportunity to directly draw the users’ attention and guide them to their products or “call to actions.” For example, designers can create stories that can be revealed to users while scrolling down the webpage or in other cases, show users the functionality of a product in animated fashion. In this research, we investigated how PS within a website can affect UX.

## SOFTWARE AND HARDWARE REQUIREMENTS

|  |  |
| --- | --- |
| S.no | Software & Hardware |
| 1. | HTML |
| 2. | CSS |
| 3. | java |
| 4. | Web Browser |
| 5. | Ethernet Adapter |
| 6. | Window 10 |

## PROJECT DESCRIPTION

Parallax scrolling is a visual technique that creates a faux-3D effect by making background images move slower than foreground images. When done well, parallax effects can make flat pixels come to life, creating a sense of depth and dimensionality.

To achieve the illusion of depth, web designers take different visual elements and move them at different speeds. For example, the background moves slowly as the user scrolls while other elements stay in place or shift at faster speeds.

Parallax scrolling is a popular trend in website design because it can make a design feel more exciting or immersive.

## WORKING

Parallax scrolling is a web design technique in which the [website background](https://www.wix.com/blog/2021/11/website-backgrounds/" \t "https://www.wix.com/blog/2019/08/what-is-parallax-scrolling-explained-with-examples/_blank) moves at a slower pace than the foreground. This results in a 3D effect as visitors scroll down the site, adding a sense of depth and creating a more immersive browsing experience.

Parallax is based on optical illusion. Since the human eye perceives objects that are close to us as larger than things farther away, we perceive distant objects as if they were moving more slowly.

The illusion has been long adopted into parallax across different mediums, fostering a realistic effect. Its first use was in traditional animation, dating back to as early as Disney’s *Snow White and the Seven Dwarfs*, and in video games such as *Super Mario*.

With advancements in [CSS](https://www.wix.com/encyclopedia/definition/cascading-style-sheets-css" \t "https://www.wix.com/blog/2019/08/what-is-parallax-scrolling-explained-with-examples/_blank) and [HTML](https://www.wix.com/encyclopedia/definition/html-hypertext-markup-language" \t "https://www.wix.com/blog/2019/08/what-is-parallax-scrolling-explained-with-examples/_blank), parallax effects later evolved into the world of [web design](https://www.wix.com/website/design" \t "https://www.wix.com/blog/2019/08/what-is-parallax-scrolling-explained-with-examples/_blank) as we know it today.

## IMPLEMENTATION

There are Following Points that helps to implement the parallex concept:

****Use it selectively:**** Parallax scrolling is much more powerful when you use it on one particular element as opposed to all pages and all the time. Use it in headers and titles, or maybe on your home page only. You want parallax scrolling to strengthen your website’s design, not distract users.

****Image compression is key:**** Parallax scrolling uses a variety of media files and CSS shapes to create a sense of depth. You don’t want to compromise your web performance and user experience with large image files that load too slowly.

****Play with color:**** Parallax scrolling isn’t just about the images in the foreground and background, but about color, too. You might use more desaturated tones in the background and more lively colors in the foreground to create an even greater sense of depth.

Though there are several approaches to achieving a parallax scrolling effect, making the background move slower than the foreground is the most popular.

A slower moving background embodies the same type of feeling as when you are inside a moving vehicle looking out: the sky and clouds in the background appear to move at a slower pace than the trees and houses in the foreground.

## REFERENCES:

**Books:**

* **HTML and CSS Quickstart Guide**
* **HTML 5 Black Book**

## Websites:

* www.w3school.com
* [www.google.com](http://www.google.com/)
* [www.javawrench.com](http://www.javawrench.com/)
* [www.javaworld.com](http://www.javaworld.com/)
* [www.projectdeveloper.com](http://www.projectdeveloper.com/)

## Faculty Guidelines:

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## GitHub Repository link:

https://github.com/shubhneetkumar/Mini-Project