Lab 1 – Productive Places Description

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1 Introduction

Students and remote workers face a persistent problem: finding environments suitable for productivity outside of the house. This issue stems from several factors, including distractions at home, insufficient privacy, and limited resources. Challenges at home often include interruptions from family, undefined workspaces, and a lack of structure, which can make maintaining focus difficult. External spaces, while an alternative, present their own issues. These include limited hours, inconsistent amenities such as Wi-Fi and seating, and unpredictable noise levels. Furthermore, finding a workspace is often time-consuming and stressful due to the absence of centralized platforms that provide reliable information about availability, occupancy, and amenities.

To address these challenges, our group presents “Productive Places,” a web application designed to help students and remote workers identify optimal locations to work or study. This app aims to eliminate the frustrations associated with home distractions and external workspace limitations by offering a streamlined solution.

“Productive Places” will provide multiple features to enhance the process of finding productive environments. Key functionalities include Location-Based Search, allowing users to find nearby workspaces, and Advanced Filtering, enabling them to select locations based on specific amenities such as Wi-Fi, seating, or quiet atmospheres. The app will also feature Community-driven reviews and ratings to offer insights from other users, Real-time availability updates to help avoid overcrowded spaces, and Detailed Workspace Profiles with comprehensive information about each location.

By consolidating these features, “Productive Places” empowers users to overcome common barriers to productivity and focus, creating a more efficient way to find workspaces that meet their needs.

2 Productive Places Product Description

Our solution to the problem of finding suitable environments for being productive outside of the house is a tool for filtering user-reviewed establishments. The goal of our software is to provide a method for finding efficient studying locations that fit the specific needs of each student, including operating hours, Wi-Fi availability, and charging outlets. The software aims to help users discover nearby locations that meet their requirements and have been positively reviewed by others as conducive places to study.

2.1 Key Product Features and Capabilities

Users can search for optimal locations suited for being productive, use filters to customize their searches based on their specific needs, and use filters to find locations that remain open during hours that fit their schedule. The proposed web application will have a section dedicated to user-generated reviews to help potential visitors.

2.2 Major Components (Hardware/Software)

Productive Places will be developed as a web application. Linux will be used as the operating system for the development environment, supporting tasks such as version control with Git and managing file permissions. Apache will serve as the primary web server, providing access to the application for students, workers, and business owners. Node.js will complement the web server by handling asynchronous operations and enabling dynamic server-side functionality. PostgreSQL will serve as the database, storing and managing the application's data, with the backend server facilitating communication between the database and the web server.

3 Identification of Case Study

This product is being developed for students who struggle to concentrate on studying and completing schoolwork at home for various reasons. Many students cannot find a quiet place to study, and people needing a quiet place to work, eat, or communicate may also use this application.

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4 Glossary

- API (Application Programming Interface): A set of rules that allows two software applications to communicate with each other and exchange data.
- Body doubling effect: When a person is more motivated to be productive in the presence of others, rather than alone at home.
- Git: Version Control
- Version Control: Allows users to keep track and manage revisions or changes made to code.
- Integrated Development Environment (IDE): Software application that provides facilities for software development.
- User Interface (UI): Visual elements of a software product.
- User Experience (UX): Overall experience and interaction a user has with a product.

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5 References

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