Technical Specifications

Project Name: Tresearch
Application Type: Web Application

Trial By Fire
Jessie Lazo
Matthew Chen (Team Lead)
Pammy Poor
Viet Nguyen

Instructor: Vatanak Vong

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Introduction

Tresearch is an interactive mapping tool in which a user can document their learning journeys. Users of this application will be able to create their own knowledge tree(s) that are composed of nodes where a node consists of a title, summary/description, and an optional tag. Tresearch will be a multi-page web application supported on the latest version of Chrome. To remain on target with intended customers, the IP range will be limited to the United States.

Communication Technologies

a. Google Docs
   i. Used for the collaboration and shared viewing of various work items that are primarily text based.
b. Google Sheets
   i. Utilized for contributions and reporting aspects relevant to the team and individual's burn up chart. Such aspects are the Sprint information, Stories Points, and Stories Completed. Data recorded is used to provide the graphic of the respective burn up chart.
c. Jira
   i. Project management tool used for planning development cycles such as the various milestone dates and sprint cycles.
d. Discord
   i. Provides a method of group communication as well as the sharing of various files/attachments. Is also used for uploading the written Daily Scrum updates of each team member, the voice chat functionality provides a platform to host meetings for the Daily Scrum or any other meeting that may arise. Various announcements are uploaded here as well.
e. Github
   i. Provides a collaborative version control and source code management system for any documents/files pertaining to the project as a whole. The commit history feature also allows for monitoring the contributions/accountability of team members on work items.

Development Technologies

a. EMCAScript v.11
b. C# v.9.0
c. .NET v.5.0 - Backend Framework
d. SQL Server 2019 Express Edition - Data Server
e. SQL Server Management Studio v.18.9 - Database Client
f. IIS v.10 - Web Server
g. VS Code v.1.6 - IDE
h. Visual Studio 2019 Community Edition - IDE

System Requirements

Users must maintain the latest version of Chrome for Windows, MacOS, Android, and Linux. A stable internet connection is also required. All systems used in development of the product are running Windows 10 maintaining the latest version of Chrome as well as the specified versions listed in the development technologies. The system hosting the IIS server will retain 8 gigabytes of RAM while a separate system hosting the SQL server will retain 16 gigabytes.