



Overview of VS-Saturn

Software Engineering COMP 4110
University of Massachusetts Lowell
Fall 2020

Team members:

Project Manager: Alex Bochman

Facilitator: Derek Lamoreaux, Luann Dias

Customer Liaison: Michael Gonzales

Configuration Manager: Dominic Gordon

Customer: Software Engineers

Instructor: Dr. James Daly*

*Please direct all inquiries to the instructor.



Project Overview

- Create an extension for Visual Studio Code (VSCode) based on the Pomodoro Technique.
- Motivation for project
 - Time management system
 - Helpful task tracking
 - Convenient extension for VSCode users
 - Non-intrusive timer notifications



Pomodoro Overview

- One Pomodoro cycle
 - Pomodoro
 - 25-30 minute block of work
 - Break
 - 3-5 minute reprieve
- Repeat
 - One 25-30 minute break after 3 cycles



Overview of Features

- Pomodoro Time Features
 - Start, reset and pause the timer
 - Amount of breaks
- Short / Long Break Time Features
 - Snooze and Skip
- VSCode theme changes to notify user.
- Pomodoro features can viewed be selecting [Pomodoro] from the status bar.



Options

- Set Short Break Time Duration
 - Options include 3, 5, and 10 minutes
- Set Long Break Time Duration
 - Options include 20, 25, 30, 45, and 60 minutes
- Set Pomodoro Time Duration
 - Options include 20, 25, 30, 40, and 60 minutes



Tasks

- The Tasks feature includes:
 - View Tasks:
 - User can see their list of tasks to complete
 - Add Task:
 - Under this setting the user can add a task to their list
 - Remove Task
 - Under remove tasks, the user can select a task from their list to be removed
 - Once the task is removed, it can be found under 'Completed Tasks'

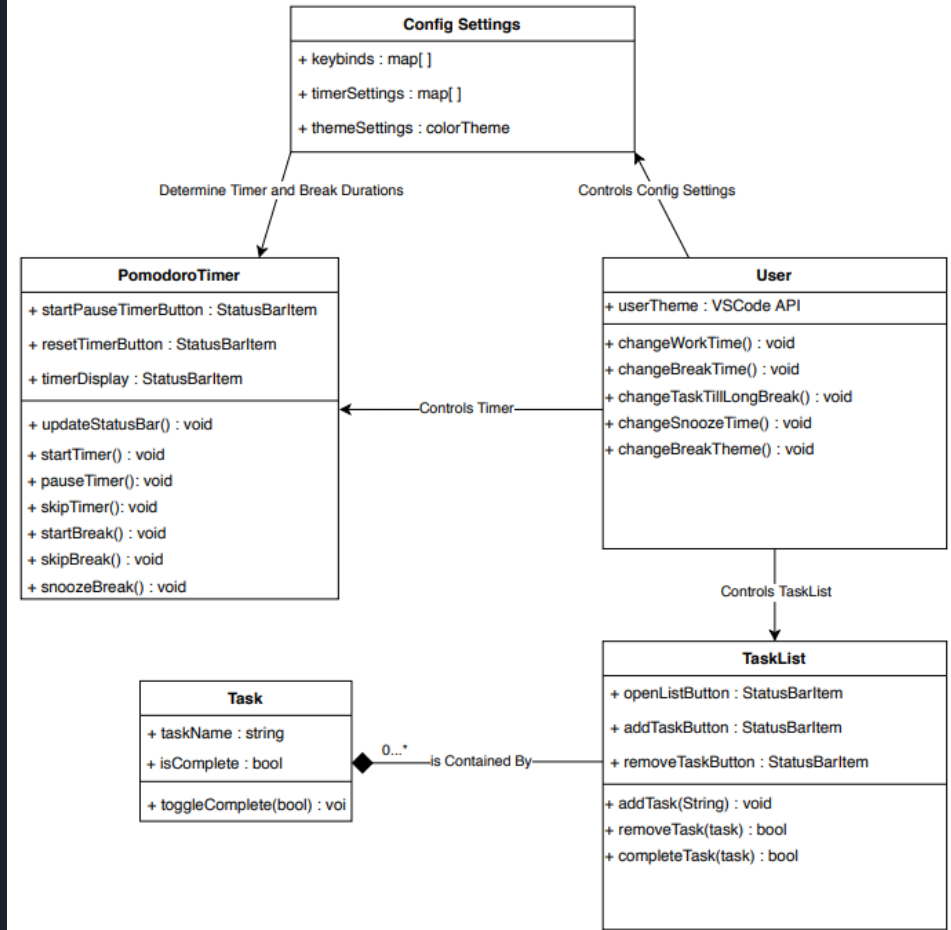


Domain Research

- Investigated Time Management Techniques
- Needed to apply domain knowledge on VSCode Plugins
- Project Constraints
 - Operating System
 - VSCode Exclusive
 - Language

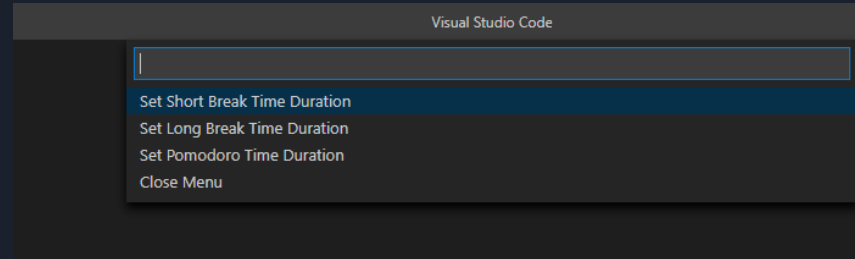
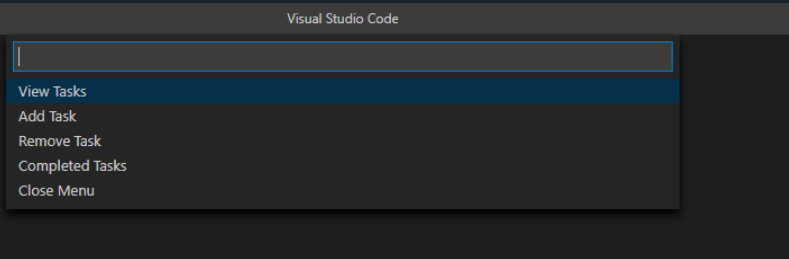
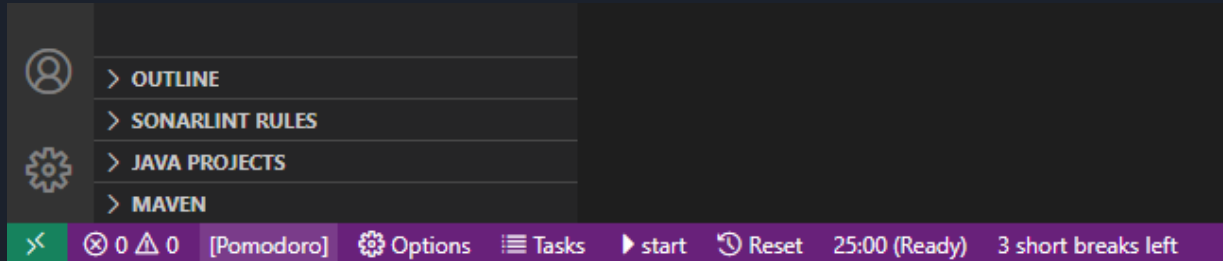
Part I: Model-based View of System

- PomodoroTimer
 - Main class houses all timer functionality
- Config Settings
 - Options for timer durations
- TaskList
 - Provides functionality for tasks
- User is primarily VSCode API based



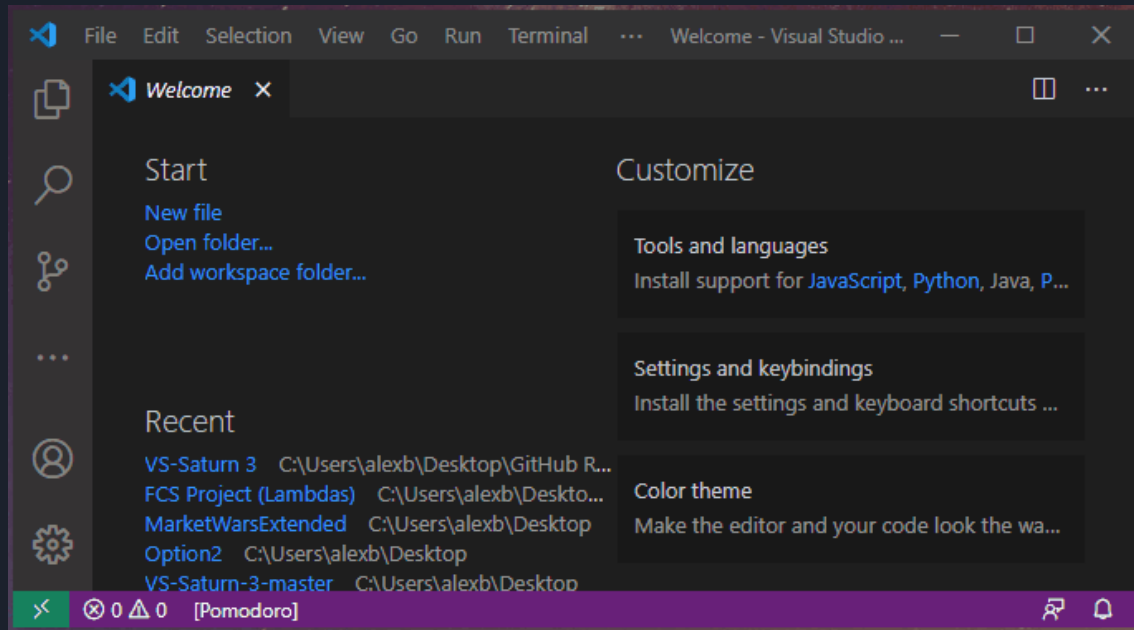
Part II: Demonstration

- Interface



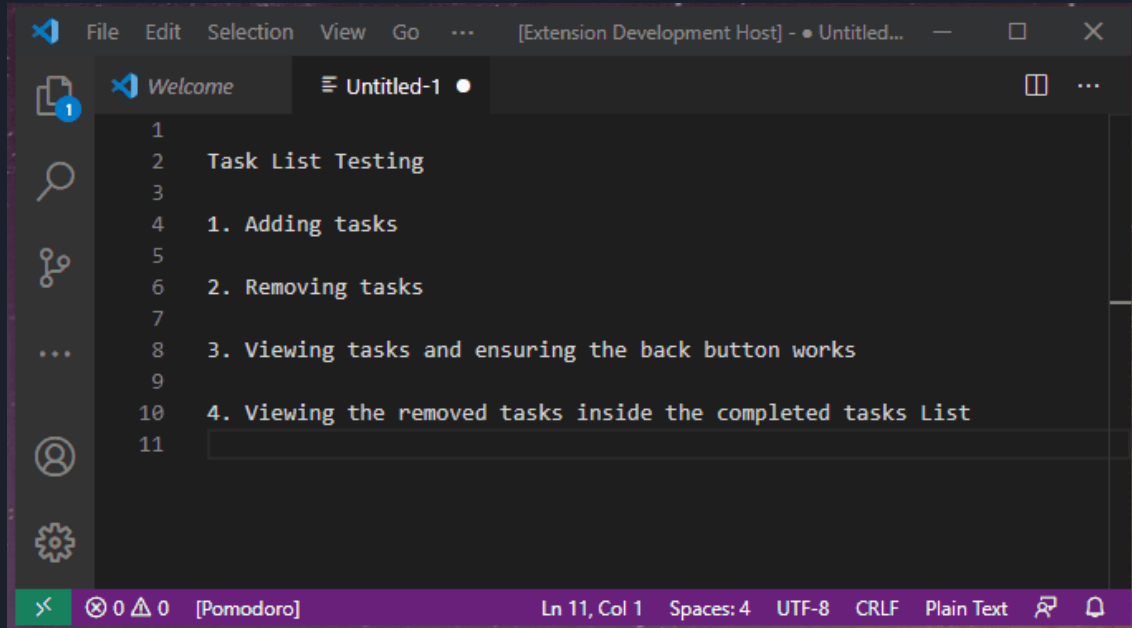
Part II: Demonstration

- Timer Manipulation



Part II: Demonstration

- Manipulating Tasks



The screenshot shows a code editor window with a dark theme. The title bar reads "[Extension Development Host] - • Untitled...". The editor has two tabs: "Welcome" and "Untitled-1". The "Untitled-1" tab is active and contains the following text:

```
1
2 Task List Testing
3
4 1. Adding tasks
5
6 2. Removing tasks
7
8 3. Viewing tasks and ensuring the back button works
9
10 4. Viewing the removed tasks inside the completed tasks List
11
```

The status bar at the bottom shows: "< 0 0 [Pomodoro] Ln 11, Col 1 Spaces: 4 UTF-8 CRLF Plain Text".



Acknowledgements

- We gratefully acknowledge and appreciate the participation of our customer, James Daly from the University of Massachusetts Lowell

Reviews from Real Customers*:



Luann Dias ★★★★★
12/5/2020

Best timer extension out there! Highly recommend



Derek Lamoreaux ★★★★★
12/5/2020

WOW!!! LOVE IT!!!

