Calendar Application: Prolog

COMP 4400: Principles of Programming Languages

Nandini Patel and Het Patel

Final Project Documentation

Calendar is a prolog based application that records all the daily tasks entered by the user. These records then can be used by the user itself to know at what time they have free time and the different tasks at different times. Through this program the user can add a task with a date, time, and, the name of the task into the record list.

The other functionality that has been added to this project is the example of the booking an appointment system. A user can check for an available appointment of any workplace. If there is no available record of the specified date and time by the user, the user can then query into prolog and make an appointment at that time.

To sum up the following is the list of all the functionalities:

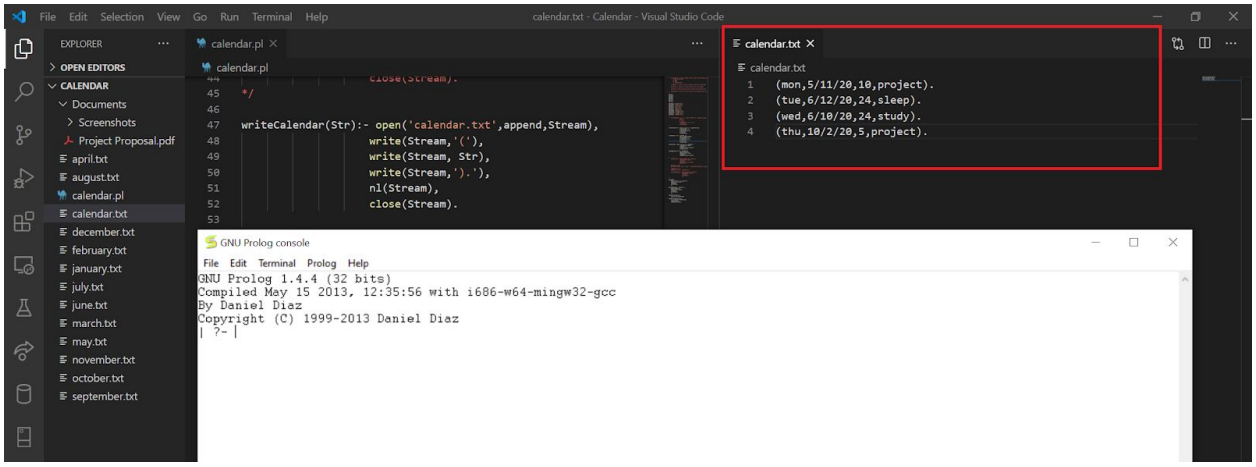
1) User can add a task to the calendar (calendar.text file where all the tasks are stored)
2) Users can add tasks to their desired month (i.e. january.txt)
3) User can see all of their tasks in the general calendar (display)
4) User can see all of their tasks in the a specific month's calendar (display)
5) User can check all the appointment based on the date and time enter they enter
6) User can book an appointment after knowing that the time slot is available

Here we had a small complication where there is no matching result found it throws an exception on the console.

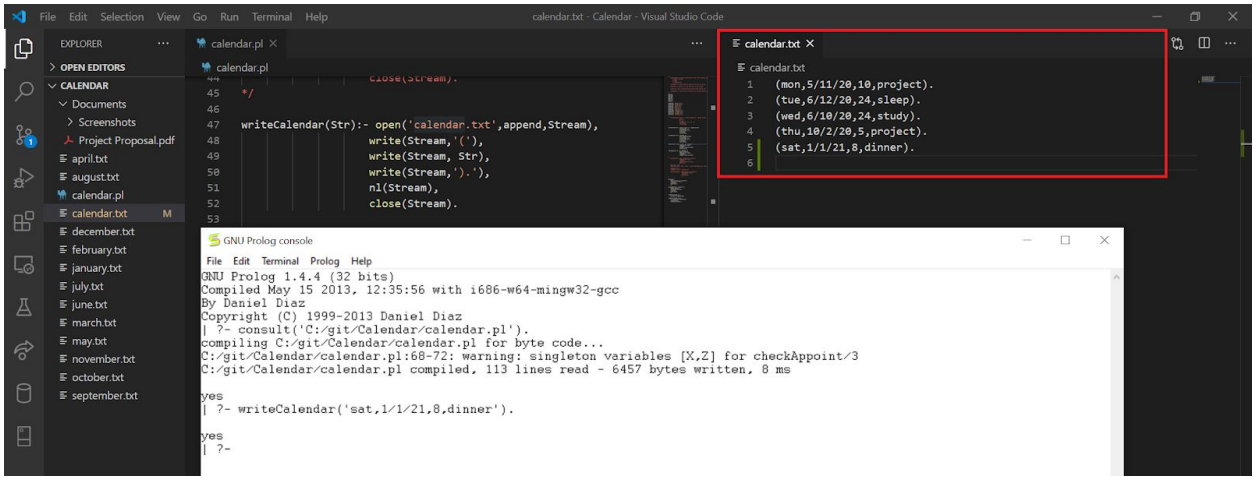
Our application has been explained in more depth using the screenshots below:

1) Add task to the task list

Before writing the query to add task:

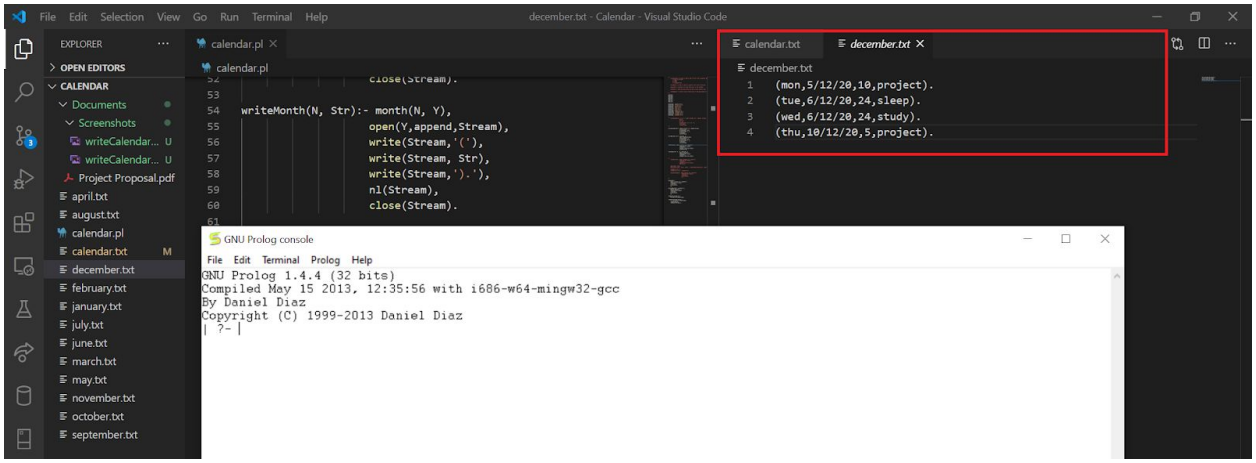


After writing the query to add task:

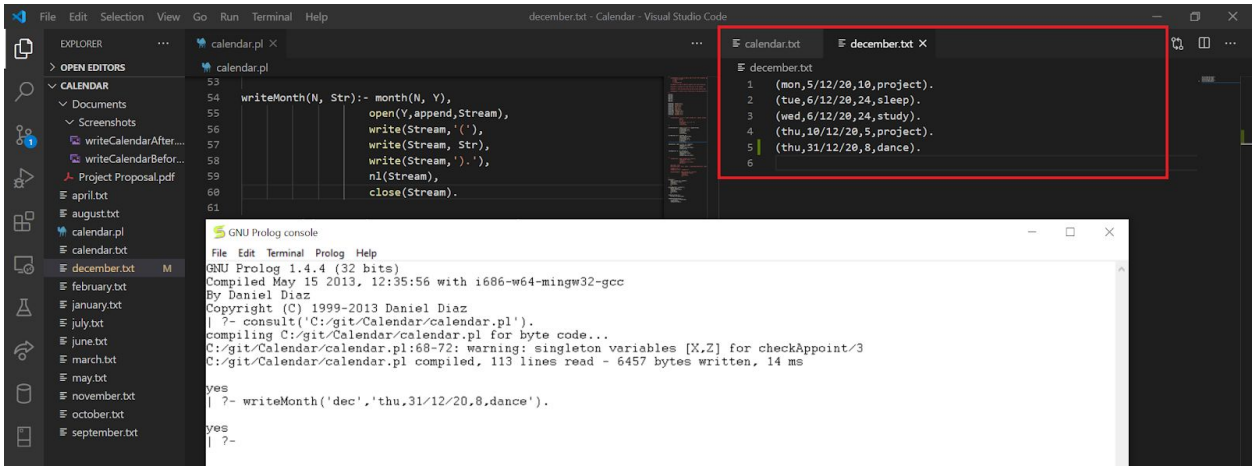


2) Add the task based on the month entered by the user to that specific month file

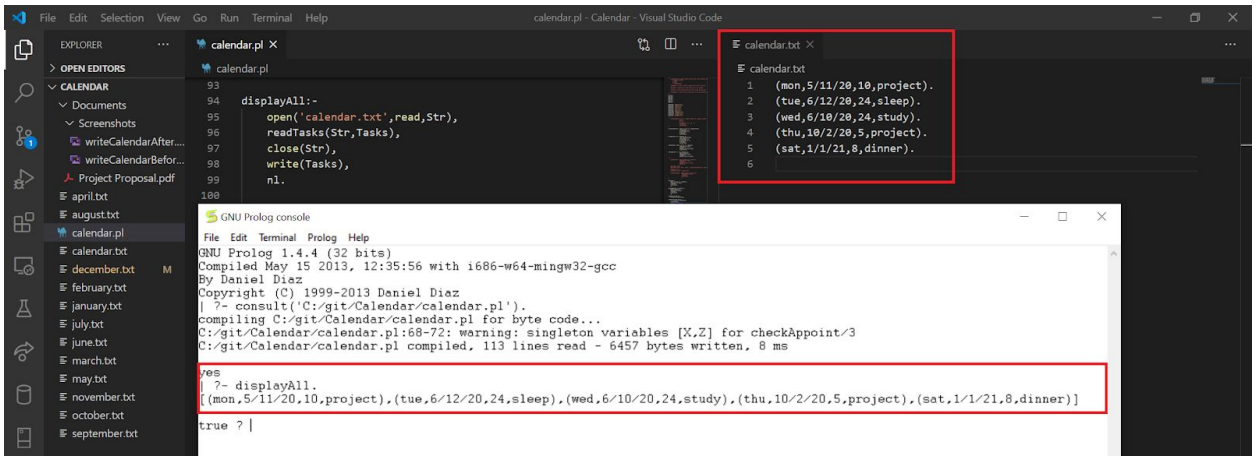
Before writing a query to a month:



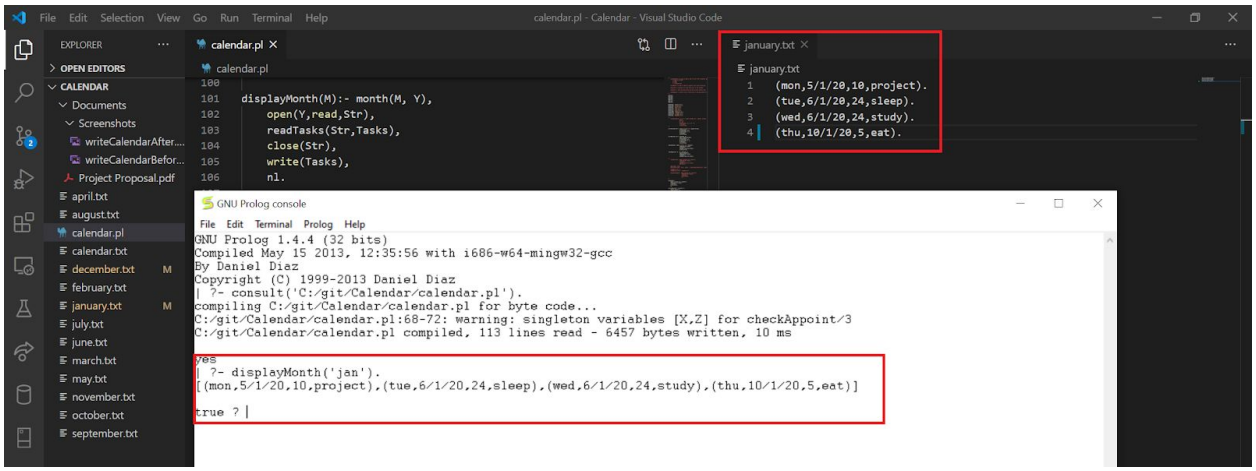
After writing the query to a month:



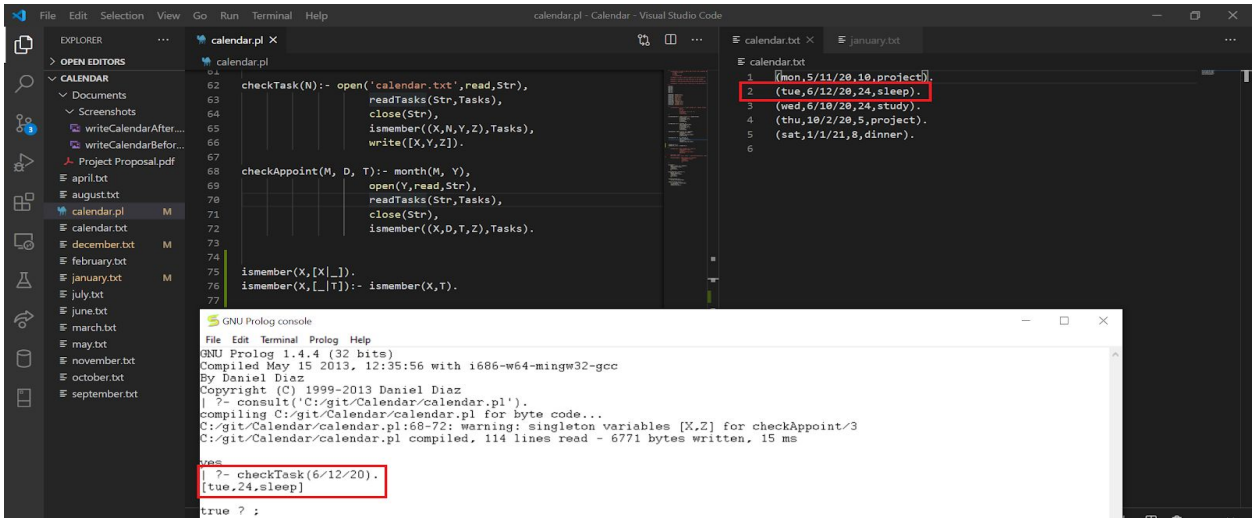
3) Displays all the tasks that the user has assigned himself.



4) Using the function displayMonth, the user can display all the tasks in that specific month.



5) Users can use the checkTask function to determine the tasks they have to do on that date.



6) checkAppoint is a function that is similar to checkTask. It differs in its output. The user can use this function to determine if the specific time entered them already exist in the list of appointments. If the output is true, then it means there exists a task or tasks at that given time.