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IST 261
Final Project Report
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Original Problem Statement

Over the past centuries, there has been an on-going stigma attached to mental health that continues even into modern day. One significant area where mental health often gets overlooked is in the corporate workforce. Today's fast-paced workplace environment creates daily stress for employees across a wide variety of industries. Due to tight deadlines, heavy workloads, and the demanding nature of many work environments, high stress is a common factor. The pressure put onto these employees goes on to then affect their overall job performance and takes a toll on their mental health.

A common term in many occupations among their employees is the phenomenon of experiencing “burnout”. According to Psychology Today, “burnout is a state of emotional, mental, and often physical exhaustion brought on by prolonged or repeated stress”(Psychology Today, n.d.). Burnout can be a result of a wide variety of factors but, the term is mostly used by employees when referring to repeated stress caused from their place of employment. For many people, the typical work day may seem repetitive and dreadful. Without motivation to get through what could be described as feeling like a never ending cycle, the average nine to five may take a hefty toll on the mental health of employees. These employees who experience repeated stress need a reminder that taking care of themselves and their mental health is just as important as their jobs.

This problem domain displays the need for a solution that addresses the daily challenges in the workplace and helps to create an emphasis on the well-being and stress management of employees. A solution is imperative in order to make the mental health of all employees a priority.

Proposed Solution and Implementation

The specific problem at hand is a lack of accessible and tailored resources for employees to manage and express their stress associated with the workplace. Most workplaces have a Human Resources department, but more times than not, the solutions offered to employees who express their mental health frustrations are general and not catered to the specific needs and struggles of individual employees. Another common failure in HR, is failing to provide a supportive community for the employees of the workplace to feel comfortable expressing their experiences and feelings in relation to their occupation.

My proposed solution to this issue was to design a mental health app that would cater to the individual needs of employees. My original proposal stated that this would include offering personalized stress reduction plans, community support, and resources to empower individuals

and motivate them to power through the daily challenges associated with their work environments.

In terms of implementation, I was able to implement classes such as the Employee class where the stress and well-being levels of each employee could be stored in instances. As well as multiple chat subclasses where an employee would hypothetically go and seek both community/peer and professional mental health support as needed.

Summary of Steps

Throughout the semester, I was able to integrate a wide majority of the topics covered in this course into my project. The first overall step of the project was to create my initial project proposal in module one, where I came up with the idea of creating the Desk De-Stress workplace mental health app. I used many aspects of my original proposal to reflect on my progress in this final report.

The next step prompted by module two was to create scenarios of potential users/actors that would benefit from the Desk De-Stress app. I was also tasked with listing potential model classes and attributes associated with them that I would implement into my code in the next assignment. The classes I listed were User Profile, Tracker, Mental Health Professional, Employee, and Community Forum and Chats. In the second part of the module, I created all of these classes as well as another class for storing Information.

In module three I used two types of tests, JUnit and Manual. In my code I tested the getters and setters of three of my model classes I created in module two, Chat, Profile, and Information to ensure that they returned the value I set. Moving to module four, which focused on inheritance and implementing interfaces. I decided to create an interface, Scheduler which had two methods, creating or canceling a task. In terms of inheritance I had my Employee and Tracker classes implement the Scheduler interface, meaning Scheduler can access aspects of both classes. Then I tested the Scheduler interface, making sure I could create and cancel instances of tracking user tasks.

Then in module five, I implemented a simple MVC application by creating my first GUI form based on instances of detailed employee information which I created in my new InformationController class. Moving forward to module six, I created a new InformationListView GUI form that displayed employees in a list format, this view was then linked to my InformationView GUI from the previous module. This way if you clicked on an employee from the list it would transfer you to the original GUI where you can view, update, delete, and filter through employee information details.

Then towards the end of the semester in module seven, I introduced a new EmployeeView GUI and used persistence to create and read information/actions performed between GUI forms. In the final programming module, module eight, I developed a new model class called WellnessActivity, along with two controllers, ActivityScheduler and ActivityItinerary. These classes enabled me to create instances of wellness activities. Using a linked list, ActivityScheduler allowed me to sort instances by start date and start time. By

integrating a hashmap, I was able to use ActivityItinerary to test updating, deleting and searching for an element in my map, listing them in order by their serial/priority number.

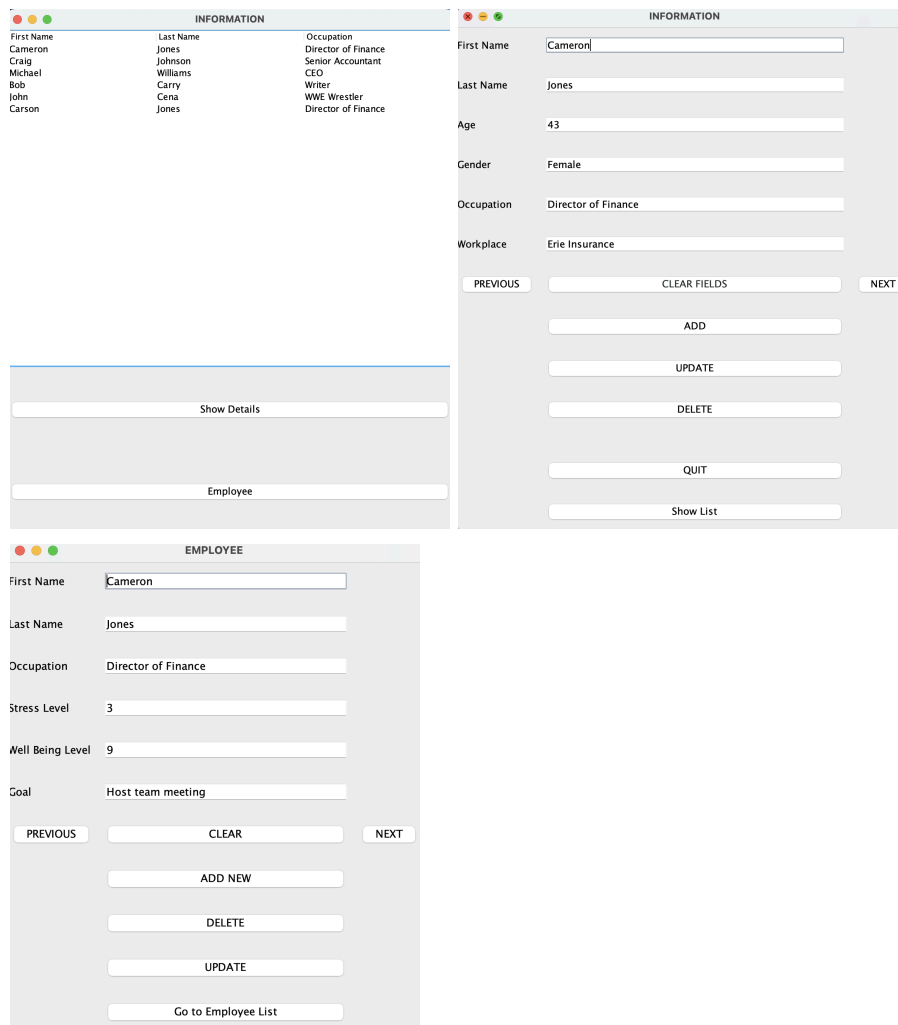
Accomplishments and Challenges

In my opinion one of my greatest accomplishments in my entire project was using a linked list. In this module I was able to create two classes WellnessActivity and ActivitySchedulerController, which I feel helped my project cohesively come together. With these classes I was able to successfully create instances of wellness activities that had different start dates and times. Each instance I created emulated an activity that employees could sign up for to help relieve stress and take a break from their work schedule. By using a linked list I was able to sort the activities by both start date and time. Through this module I was able to create a functional schedule that displays upcoming activities that are available for sign up.

Overall, I feel that I ran into limited challenges throughout the course of the semester and for the most part only ran into minor issues that were solved with a little use of trial and error. However, one module I struggled consistently with was with persistent data implementation. I found that I was able to write to a file successfully, but I didn't do it via persistence. This struggle continued into the second part of implementing persistence when it came to integrating the GUI forms. With the GUI forms, I encountered a few errors such as an index out of bounds and also some button linking issues.

Screenshots

The screenshots below include some of my functional GUI forms I created during this project. The first shows basic information about employees in a list format, the second shows a selected employees profile information in full detail, and the third shows some different more specific details inputted by employees.



Future Plans

In terms of achieving my original goals for creating a fully functional application, I believe I've only scratched the surface during this course. While I recognize there's still a lot of work ahead to create a successful application, I feel that this course has provided me with a solid starting point and guided me in the right direction to understand what needs to be done to create a functional application.

Looking ahead, I have several future goals that I plan to implement. Firstly, I aim to make all of my classes fully functional, focusing mainly on my chat and professional classes. Additionally, I intend to create GUI forms for different chat instances. In the near future I would also expect to complete one of my original goals of creating motivational pop-up reminders for employees throughout their workday. I believe that by accomplishing these tasks, I can greatly enhance my project.

Through both my current accomplishments and my future goals, I believe that my application will achieve my overall goal of providing employees with an opportunity to actively manage their mental well-being both on and off the clock.

References

Burnout | Psychology Today. (n.d.). <https://www.psychologytoday.com/us/basics/burnout>