



جامعة جدة
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قسم علوم الحاسب والذكاء الاصطناعي



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1.1 Problem Description



Many people face many life problems such as a breakdown of a device or electrical problems, which requires finding help from the appropriate engineer. Or maybe we may even have problems with studies, and we need a private teacher or a house worker to help us with the housework, or sometimes you may even need a driver. The process of searching for help from the right person can be difficult and requires a lot of time and effort. The Quick helper application provides you with all the helpers in one app.



1.2 Application Description

Quick Helper application:

- It helps users to find the right help from the application and saves a lot of time and effort.
- In the beginning, the program will welcome the users in Quick Helper application.
- Then the program will display two options, Searching for Help or Sign up as A new helper.
- When the user chooses "Sign up as A new helper" option. It will ask the user about the type of help if he/she (teacher, engineer, or helper in general service) and then it will write in the correct file. The user personal data such as (name, age, ID, gender).
- As for the second choice, which is Searching for Help it will display three more option which is Teacher, Engineer, General services.



- When the user chooses "Teacher". The program will ask about the type of teacher which may be (mathematics teacher, science teacher, or English teacher).

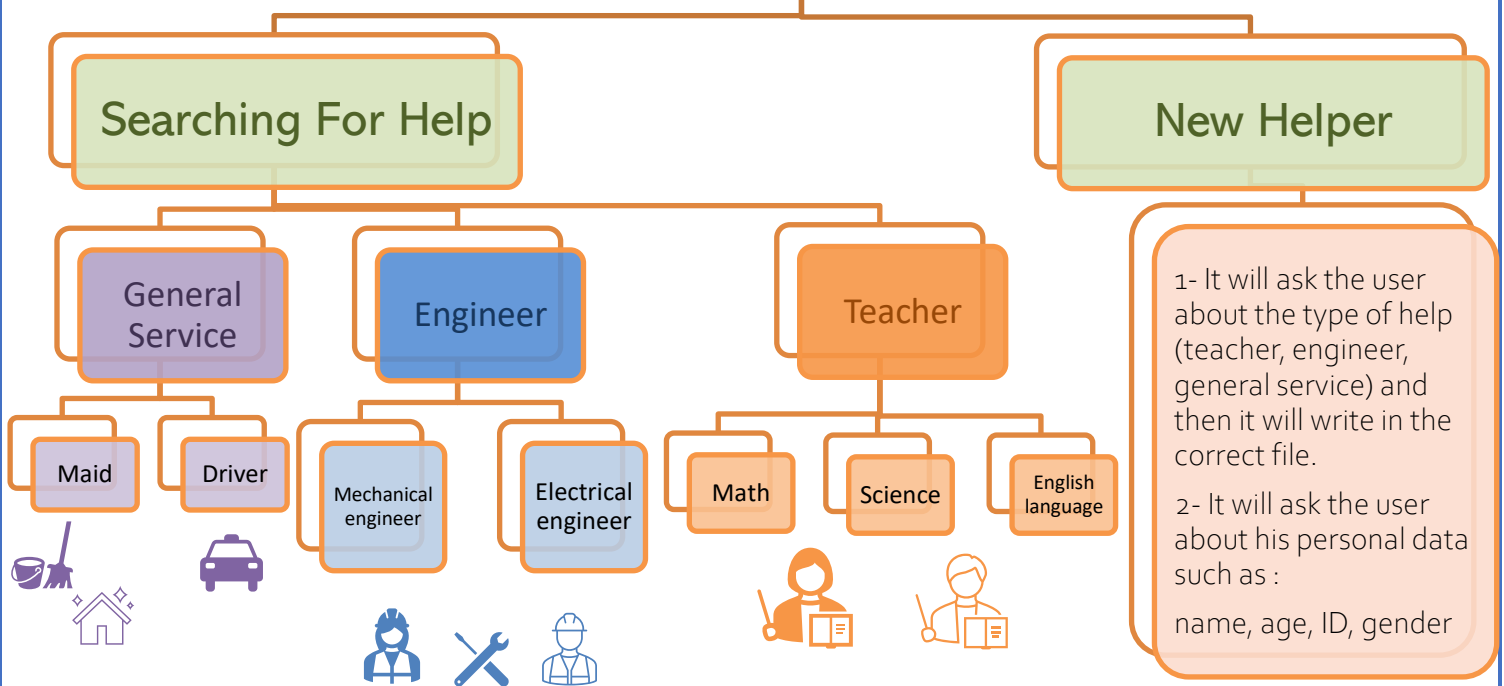


- As will as for the "Engineer" option. which is it will ask the user if he/she wants an electrical or mechanical engineer?



- As for "General services" option. It will display two other options. Which is do you wants house worker (maid) or taxi (driver)?
- After selecting the worker, the program will estimate the price and display it with the details of the operation for the user.
- Finally, after completing the process, the program will ask the user whether he wants to return to the home page or end the program.

Quick Helper !



1.3 Classes and Relations

We will use 5 classes: NewHelper class, SearchingForHelp class and Teacher class, Also Engineer class and Services class.



- **The NewHelper class:**

This class provides the possibility to register to provide your services, whether you are a teacher, an engineer, or even to offer public services. Where the program asks the user for personal data such as name, age, ID and gender and asks about the type of service provided and records it in a file. That means this class are related with Teacher class and Engineer class and Services class.



- **The SearchingForHelp class:**

The purpose of SearchingForHelp class is to reserve users for a specific service. It offers 3 options, first a teacher, second an engineer, and finally, public service providers. Which means that this class is also related with Teacher class and Engineer class and Services class.



- **The Teacher class:**

Teacher class is designed to choose the right teacher. At first, the program asks the user whether he wants a math teacher, science teacher, or English language teacher. Then the program will ask for the appropriate time, period, and date. Then the program will estimate the price and display it with the details of the operation for the user.



- **The Engineer class:**

Engineer Class is designed to select the right engineer. At first, the program asks the user if he wants an electrical or mechanical engineer. Then the program will ask for the appropriate time, period, and date. Then the program will estimate the price and display it with the details of the operation to the user.



- The Services class:



The purpose of the Services Class is to display public service providers such as a house worker (maid) or taxi (driver). Where the program asks the users first about the type of service (maid or driver) and then it will ask about the appropriate time, period, and date. Then the program will estimate the price and display it with the details of the operation to the user.

Note:

Each of the teacher class, engineer class and even services class has initial employee data for a several of employees to choose, as well as the possibility of adding an employee to them from a NewHelper class.