**Advanced Programming**

**Spring 2023**

**Projects Ideas**

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| **Topic Title** | **Description** |
| 1. **University** | **Create a GUI for FUE University, where each student has Name, ID, age, level, & list of registered courses.**  **By entering student’s ID, you can get full access to student’s full data like what level student lays in & what are the courses student passed, failed, or currently registered in.**  **There should be Staff, where each staff member must have title (Teacher assistant, Dr) & what are the courses this staff member is currently giving.** |
| 1. **Hospital** | **Create a GUI for Hospital, where each person can be either a patient or a doctor.**  **If person is a Doctor, then he/she must have name, ID, & specialization.**  **If person is a Patient, then he/she must have name, Medical case, & what Dr is the patient currently attached to.** |
| 1. **Coffee Shop** | **Create a GUI, where there is a menu for the coffee shop divided into sections Like for instance [hot drinks] (Turkish coffee, French coffee, tea)**  **[cold drinks] (ice-coffee, ice-late)**  **[desserts] (Cinnabon, cheesecake, ice-cream)**  **Client, must have client no. & his/her order, & price per order.** |
| 1. **Library** | **Create a GUI, where is a Book List Menu divided into sections. For example (Literature, fantasy, etc.), book price for rent, book’s ID.**  **By entering Book’s ID, it should give a review if a book is available or being borrowed.**  **There should be client ID, name, address, & books borrowed, price for books borrowed per days.** |
| 1. **Cinema** | **Create a GUI for cinema, where there is a Menu for films available based on criteria (horror, fantasy, romance) for example**  **Each movie must have price to watch & specific seats, to view if seats are reserved or available.**  **So client can reserve available seats only & pay for movie to watch.**  **If a client reserves a seat, it becomes un-available.** |
| 1. **Hotel** | **Create a GUI for Hotel where there is a list of available rooms, each room has a number, view description, price, & if it’s available or reserved.**  **Each client has an ID, name, room reserved to that client, number of days client is reserving the room.** |
| 1. **Airline** | **Create a GUI to have an airline system where traveler can view available flights, time slots, & available seats.**  **Each trip should have an ID, destination & take off, price for trip, & number of hours for trip.**  **Traveler should be able to view available seats & in case of reserving a seat, this seat number should not be available for anyone else to reserve.** |
| 1. **Club** | **Create a GUI where there is a club called ELZOHOUR club**  **Club has different sports to practice like football, basketball, swimming, gym, etc.**  **Each sport has specific price to be included in.**  **Each member in the club has an ID, name, address, & if he/she is involved in a sport or not. & how much paid per month for the practiced sport.** |
| 1. **Cloths Shop** | **Create a GUI for cloths Shop to sell cloths at.**  **Each item should have price, description, available sizes, & no of items available for same item.**  **Client should be able to buy any available item, considering that when client buys an item, count of item should decrement.**  **Client can buy more than one item & you have to calculate total for the selected items by that client.** |
| 1. **Weather APP** | **Create GUI to select country & city.**  **Weather app should tell you temperature in the selected region**  **Weather app should be able to change value of temperature from C to F.**  **It should give you weather updates of current day & three days in advance.**  **Based on current temperature & weather conditions, weather app should give user recommendations on what to wear or have. Like (drink lots of water, or get an umbrella)** |