

**Programming Fundamentals**

**Final Project**

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**Submitted to:**

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**Problem Statement:**

The problem that this code aims to solve is the lack of an efficient and streamlined system for managing real estate properties, specifically regarding the booking and management of plots. The current process of booking and managing plots can be time-consuming and prone to errors, making it difficult for administrators to keep track of the status of each plot. Additionally, regular users have limited access to information about the available plots, making it difficult for them to make informed decisions about their purchase.

**Program Functionality:**

* This program Provide a real estate management system that allows an administrator to book plots, view the status of plots, and edit the details of a booked plot.
* Regular users can only view the status of plots.
* Store information about the plots in a 2D array, which can be accessed by the administrator to perform various functions such as booking, editing, and viewing status.
* Include methods for logging in as an administrator, booking plots, viewing the status of plots, and handling payments (full or installment).
* Implement error handling for input mismatch exception.
* Provide a platform for the administrator to handle the real estate property efficiently.
* Provide transparency to the end-users by providing the information of the plots which they can access.

This system will simplify the process of managing real estate property by providing a user-friendly interface for both the administrator and regular users.

**Benefits:**

* Ease the process of booking and managing plots, making it more efficient and less prone to errors.
* Provides a user-friendly interface for both administrators and regular users.
* Allows administrators to book plots, view the status of plots, and edit the details of a booked plot.
* Regular users can only view the status of plots, which provides transparency to the end-users by providing the information of the plots which they can access.
* Stores information about the plots in a 2D array, which can be accessed by the administrator to perform various functions such as booking, editing, and viewing status.
* Includes methods for logging in as an administrator, booking plots, viewing the status of plots, and handling payments (full or installment).
* Error handling for input mismatch exception.
* Increases productivity of the administrator by handling the real estate property more efficiently.
* Can serve as a reference for similar projects.

Overall, this program provides a comprehensive solution for managing real estate properties, making the process of booking and managing plots more efficient, transparent, and user-friendly. It can be a valuable tool for administrators to handle the real estate property more effectively and for regular users to make informed decisions about their purchase.

**JAVA Terminologies Used:**

1. Type casting
2. Loops (for, while)
3. Arrays
4. Exception handling
5. Methods
6. String Functions
7. Built-in functions
8. Conditional Statements