

# C++ Project - Listing Agency Management System

Student 1: Alex Marusteri

Student 2: Orlando Dragu

File(s): data.txt, favorites.txt

## Project Purpose:

This project simulates a simple real estate listing agency. It allows adding, editing, deleting, viewing, sorting, and managing favorite listings. It is split into two executables: user1 and user2, each handling a different part of the functionality.

## Files Used:

- data.txt: stores all real estate listings in CSV format.
- favorites.txt: stores favorite listings marked by the user.

CSV Format:

<title>,<price>,<description>,<size>,<rooms>,<bathrooms>,<hasParking>

Example:

CozyHome,95000,Quiet area,80.0,3,1,1

## Executable: user1 - Listing Management (Alex Marusteri)

1. Add new listing:

./user1 1 data.txt <title> <price> <description> <size> <rooms> <baths> <hasParking>

2. View all listings:

./user1 2 data.txt

3. Delete listing by title:

./user1 3 data.txt <title>

4. Sort and display listings by price:

```
./user1 4 data.txt
```

### **Executable: user2 - Listing Interaction (Orlando Dragu)**

5. View listing details:

```
./user2 5 data.txt <index>
```

6. Add to favorites:

```
./user2 6 data.txt <index>
```

7. Purchase (remove) listing:

```
./user2 7 data.txt <index>
```

8. View favorites:

```
./user2 8 data.txt
```

9. Edit listing by index:

```
./user2 9 data.txt <index> <title> <price> <description> <size> <rooms> <baths> <hasParking>
```

### **Classes Used:**

1. Class Listing:

- Attributes: title, price, description, size, rooms, bathrooms, hasParking
- Methods: toCSV(), fromCSV(), print()

2. Class ListingManager:

- Attributes: path, favoritesPath
- Methods: addListing(), readListings(), writeListings(), displayListings(), viewDetails(), addToFavorites(), purchaseListing(), deleteByTitle(), editListing(), displaySortedListings()