Game Premise

City Builder is a strategy game where players take on the role of a city planner and build their own metropolis from scratch. In the game, players are given a certain amount of money to start with, which they can use to buy resources, buildings, and other assets needed to grow their city. As players progress through the game and their city grows, they earn additional points that can be used to purchase even more resources and expand their city further.

City Builder Game Documentation

Overview

City Builder is a game where players build and manage their own city. The game was built using the Windows Presentation Foundation (WPF) framework in C#, with guidance from tutor Thomas Margraff. It consists of six classes, utilizing foreach loops and List data structures.

Gameplay

To play City Builder, players start by placing buildings and assets on the game board using the buttons provided in the MainWindow. Buildings and assets cost money, which is deducted from the player's available funds, which are always available.. However, placing these items also generates points and greetings
First greeting after 500 points
Second after 1000 points
Third on is almost done with the city building, but you can still keep playing.

The game board is represented by a grid of cells, each of which can hold one building or asset. All Items are appear on the Grid through the stroller views.

Conclusion

City Builder is a fun and engaging strategy game that challenges players to build and manage their own city.
With:
6 classes,
Inheritance
if else statements
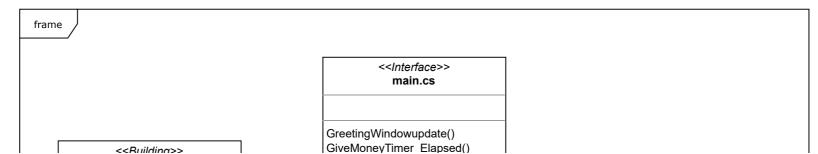foreach loops,
List data structures
Audio File,
Media Files

it provides a solid foundation for further exploration and development.
Thanks to Thomas Margraff https://github.com/gurrenm3 for his tutoring and expertise throughout the project.
He was helping me with a Timer setup, that players' money could be added every 10 minutes, he also explained many XMAL features that I didn't know about, and showed me how different I can instantiate classes and some other advanced feature in this game.

frame

| <<Interface>> |
| **main.cs** |
| |
| GreetingWindowupdate()
GiveMoneyTimer_Elapsed() |

| <<Building>> |

<<Building>>
Building

string Name;
string BuildingType;
int Cost;
bool IsPurchased;
int Score;

UpdateCash()
UpdateScore()
SetCurrentBuildingType()
ToggleBuldMenuButtonClick()
PreviusBuldinMenuBtnClick()
NextBuldinMenuBtnClick()
buyBuildingClick()
buildingMenuSelectionChanged()
Window
PlayClickSound()

<<Interface>>
City

List buildingTypes
List transportationTypes
List restaurantTypes;
List entertainmentTypes;

+ method1: AddEntertainment()
+ method2: CreateEntertainment()
+ method1: AddTransportation()
+ method2: CreateTransportaion()
+ method1: AddRestaurants()
+ method2: CreateRestaurants()

<<Player>>
Player

public Player() {}

+ method1(Type): PurchaseBuilding()

<<Resturant>>
Restaurant

Restaurant : Building

<<Wallet>>
Wallet

int currentAmount

GetCurrentAmount();
CanPurchase();
Add();
Remove();
Set();

<<Transportation>>
Transportation

Transportaion : Building

<<Entertainment>>
Entertainment

Entertainment : Building