# Capitalist Business Game

#### Idle / Incremental / Clicker Game Project / Template

✓ V1.1 released. Thanks for purchasing ☺

#### What is this asset for?

This asset is for those people who want to make an Incremental / Idle game related to businesses, capitalism. The package requires barely no additional input or scripting. Everything is premade for you. But this doesn't mean it cannot be customized. You can always use your own textures, sprites for UI buttons or business icons. This template was made to get your game up and running in very short amount of time.

# **Project Structure**

This is the first published version. I tried to keep everything clean and organized. The project at the moment should look like this:

This looks like a typical project.





Most of the time you'll be spending in the **Resources** folder creating new **SctiptableObjects** and placing them in specific folders. For instance, after creating new **BusinessInfo ScriptableObject** you need to place it in the **Businesses** folder in order for game to be able to load them. More on that later.

Also you can notice that there is a **scales.xml** file. What does it do? Well, it simply holds a lot of number scales (like Thousand, Million, Billion, Trillion etc. ). The last one I guess is **Uncentillion** which is 10^306.

<?xml version="1.0" encoding="ut <ScalesCollection> <Scales> <Name>Thousand</Name> <Name>Million</Name> <Name>Billion</Name> <Name>Trillion</Name>

## Creating your own Businesses, Upgrades..

If you don't like default pre-made businesses, managers or upgrades, you can always modify them or even create your own.

Let's say you want to create a brand new business.

Firstly, in order to create one, click right mouse button on **Resources** folder. Head on to **Create** -> **BusinessInfo** as is shown in this picture.



As you can see there are also other options like **Manager**, **Upgrade**. So after clicking that you'll see that new **ScriptableObject** was added.

Please choose a meaningful name as it will be displayed later in the game.



To see what's inside select it. You'll be given some parameters you can set. These ones are **Starting** values. This means that when you reset your game, all the ScriptableObjects will set their values to the default ones.



**Costs To Own:** this is the starting price, how much you need to pay in order to own this business. It shows up in **UI Element** when it's not yet owned.



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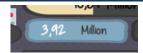
**Starting Revenue:** is how much money your business will be making when completing one loop.



**Coefficient:** this is just used for calculating Invest cost. I recommend you to set it between **1.05** to **1.17**. Equation for calculating invest cost is

startingInvest \* coefficient ^ currentBusinessLevel

**Starting Invest Cost:** how much money it costs to invest / level up the business.



**Starting Time:** This is how long you need to wait until you get your revenue / profit. You should input amount of seconds it takes, for example **5s.** The business progress bar will show you how much time is left.



**Icon:** you can plug in your own sprite representing Business. Just drag and drop directly into the slot or chose in the inspector.



**Unlocks:** this unlocks every time your business reach specific level. For example reaching level

How to set up. This one is a little bit trickier. So **BusinessInfo ScriptableObject** is basically a container to hold data. I decided not to make complete new ScriptableObject for Unlocks as it only contains two numbers ( levelToUnlock and timeMultiplier ). All the information about unlocks is stored in the array. To actually add unlock, set the array size to how many you want to have.

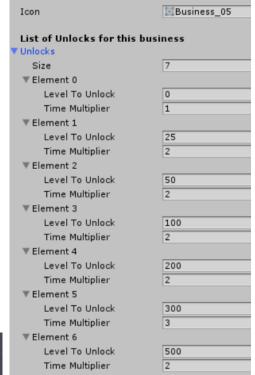
Starting Time

Let's say 7 unlocks. Now start putting the values. Please make sure that the Element 0 Level To Unlocks is always set to 0.

As for the time multiplier, you can choose whatever you want.

Let's say every **10** levels your business gets **x2** bonus on time.

If you wonder where you can see all unlocks while in game, just press the **Unlocks** button at the top.



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UNLOCKS

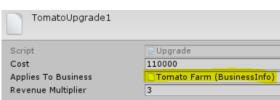
That's all for business. The same applies to other **ScriptableObjects** like Upgrade, Manager. It's all about plugging your own **icons**, setting **values**.

One thing though,

When creating **Manager**, drag the **BusinessInfo ScriptableObject** into the Runs Business field. Like so:



Same applies to **Upgrades:** 



# What are the States? BusinessState, ManagerState etc.

Well, as I have mentioned before, **ScriptableObjects** are used to store data. However there is one downside about them – they cannot serialize or save data changed during Runtime / While playing the game. For example, you start up your game, buy businesses, managers, their **bool** change their state to **true** (manager **isHired** = true, business **isOwned** = true), but when you exit the game those values set to default ones ( back to **false** ).

That's why custom classes are used, like **BusinessState** which holds the information about business state during runtime, so that when exiting the game they can be saved / serialized and loaded next time.

All the states files are saved into binary format and stored in the persistentData folder which is different for every game. If this folder already contains older business, manager files, it loads them up. This allows us to continue where we left off last time.

You don't need to do anything about them. I just want to let you know where they are used for.

# **About the money**

This game is all about money. You buy businesses, upgrades, hire managers so the money flow is constant. If you invest more money, you'll get more in return. After playing game for some time you'll notice that you have earned quite a lot money. The problem here is that be default there aren't many data

**types** which can store really huge numbers, and by huge I mean ones with over 100 zeros. To solve this, a custom data type is used: **StdBigNumber** which can hold whatever number you want. It also lets you easily convert it to a string or other data types. **Do not delete Plugins** folder as it contains important class.

#### **Prefabs, UIElements**

As the game is mostly based on UI, there are few prefabs in the **Resources** folder, each representing different UI Element. For instance, **BusinessUIElement** holds all the panels, text, icon needed for business. Do not delete them.

When the game starts, it automatically takes all the values from specific



\_GameManager

**ScriptableObject** and fills everything for you.

Same goes for **ManagerUIElemtent**, **UpgradeUIElement** and **UnlockUIElement**.

They get instantiated at the start and are parented to Container game object with a **Grid Layout Group** attached, to make it look clean and organized. This way it can even automatically resize, which is important in mobile.

#### **UI Structure**

UI has separate Window game objects like StartUp, Upgrades, Unlocks and so on. They are enabled and disabled during

runtime. Can be opened by clicking buttons at the top:



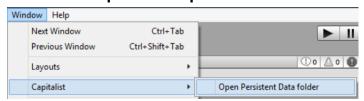
Take some time and examine its

structure. If you wish you can change the buttons' style or placement, change background, fill the PlayerInfo window. If you accidentally deleted it from the scene, it's located in the Resources folder, just drag it into the scene.

# Just before publishing the game

Before finally publishing your game, you would want to playtest it, to see if everything is working fine for you. After that, you would also want to delete everything in **persistentData** folder, just to make sure you deploy a complete fresh game.

To do so, I've added a neat little shortcut to access this directory. Just go to **Window -> Capitalist -> Open Persistent Data Folder.** 



And **delete** everything you see there. It contains money, time save files as well as business and manager states.

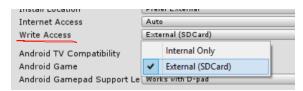
After you've done all that, you're now ready to **Build** ©



## ! Building for Mobile!

When deploying to Android for example, make sure to set write access to external. Because sometimes I find that it doesn't save some files.

Edit -> Project Settings -> Player, under Other Settings select Write Access to External (SDCard).



If game doesn't compile: Try change API compatibility level to .NET 2.0 also.

#### **Conclusion**

Thank you for purchasing this asset. This is the first ever asset for me, so if you have noticed some mean bugs, have any questions or suggestions, don't be afraid to contact me. Happy developing and Good Luck becoming a Capitalist ©

#### **V1.1**

#### What's new?

- Fixed some game breaking bugs like: Invest cost breaks after 2.14 billion, Saving bug
- Added Sounds, There are 4 sound effects
- Added 10 additional background textures. They are seamless, tileable
- Rate game button
- Mute button