

# PICTURE QUIZ +

19.02.2022 VERSION 3.0.3

Since the new version is just being rolled out, the documentation and video guides will be supplemented over a short time until the final versions

[Asset Store Page](#)

[Always up to date documentation](#)

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## **CONTENTS**

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<b>ABOUT</b>	<b>3</b>
<b>FIRST STEPS</b>	<b>7</b>
<b>FILE STRUCTURE AND NAME CONVENTION</b>	<b>11</b>
<b>TASKS SETUP</b>	<b>16</b>
Localization	21
<b>GENERAL SETTINGS</b>	<b>24</b>
<b>UI SETTINGS</b>	<b>27</b>
<b>ADVERTISEMENT, IN-APP PURCHASING, GDPR, SOCIAL SHARING</b>	<b>31</b>
UnityIAP	33
Advertisements	35
Unity ADs	36
AdMob	37
GDPR	39
Social sharing	40
Cloud saving	41
<b>WEB SERVER STORAGE</b>	<b>42</b>
File preparation	43
Upload to server	46

# ABOUT

Picture Quiz Plus based game is a game for mobile devices of the most popular genre. Players guess what is implied on a picture and input an answer in a given field or choose a single answer between four variants.

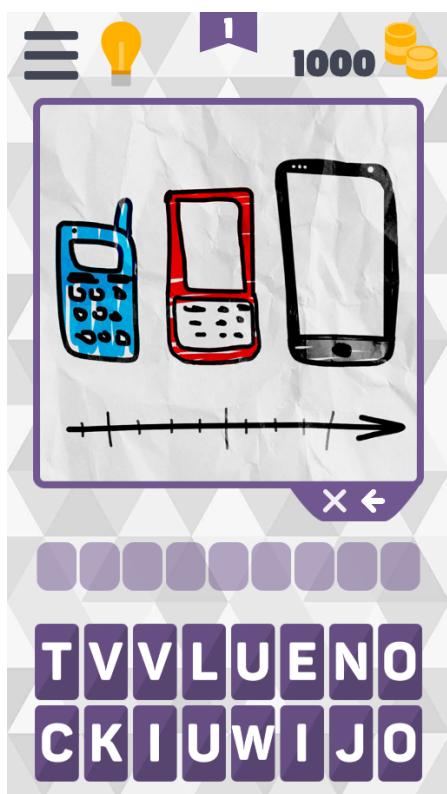
When the answer is of *input type*, players only have information about word length at the level start. There is a group of mostly random letters that includes correct ones near the answer field. Players can tap (click) these letters to fill empty fields with their values. If an entered word matches a correct answer this level is considered as complete. There are three hints available in case when players get stuck. The first one is *Reveal one letter*. It reveals the first (second etc.) letter in the answer and blocks it to avoid clearing. The second hint is *Remove excess*. It removes almost all wrong random letters that are given at the start. And the last hint is *Get the answer*. It automatically completes the correct answer and finishes the level.

When the answer is of single choice type, players have another three hints at their disposal. *Remove one option*, *Remove two options* and *Chance to make a mistake*. The last one gives an opportunity to choose an option without losing the level in case of wrong answer or to refund the hint cost if the answer was correct.

There is an in-game currency – coins. The described hints can be bought for them.

Players can earn coins in a couple of ways. The first is to complete a level and get coins for it. The second is to watch an AD and to get coins as reward. And the third is to buy coins for real money.

There are several game modes available to set up.



Standard game mode where the picture is a puzzle itself.

This image shows a game mode with a picture and a description. The top section is identical to the first one. The main area features a photograph of a football team from the early 20th century. Below the photo is the text: "This national team won the first football World Cup". The word search grid below contains the letters: B, U, I, W, A, R, C, G, Y, U, K, L, U, Y, J, U.

This image shows a game mode with a question. The top section is identical to the first one. The main area features a question: "This national team won the first football World Cup". The word search grid below contains the letters: Y, U, X, W, A, J, U, G, L, Q, K, C, Y, U, U, R.

This image shows a game mode with an animal image. The top section is identical to the first one. The main area features a close-up photograph of a beaver's face. Below the photo is the text: "Beavers accumulates fat in this part of the body". The word search grid below contains the letters: S, T, O, M, A, C, H, T, H, I, G, H, S, T, A, I, L, C, H, E, S, T.

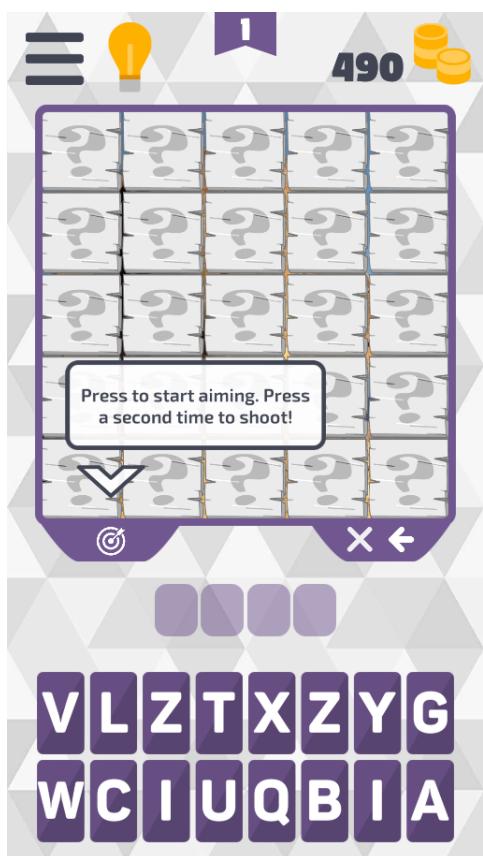
Picture with description or question on it or pure text .



Picture under protective film. It is necessary to erase the protective layer with a spatula, spending coins on it.



Pixelated picture. By pressing the action button for coins, the pixel grid increases its clarity. The engine automatically applies shader masks to the original image.



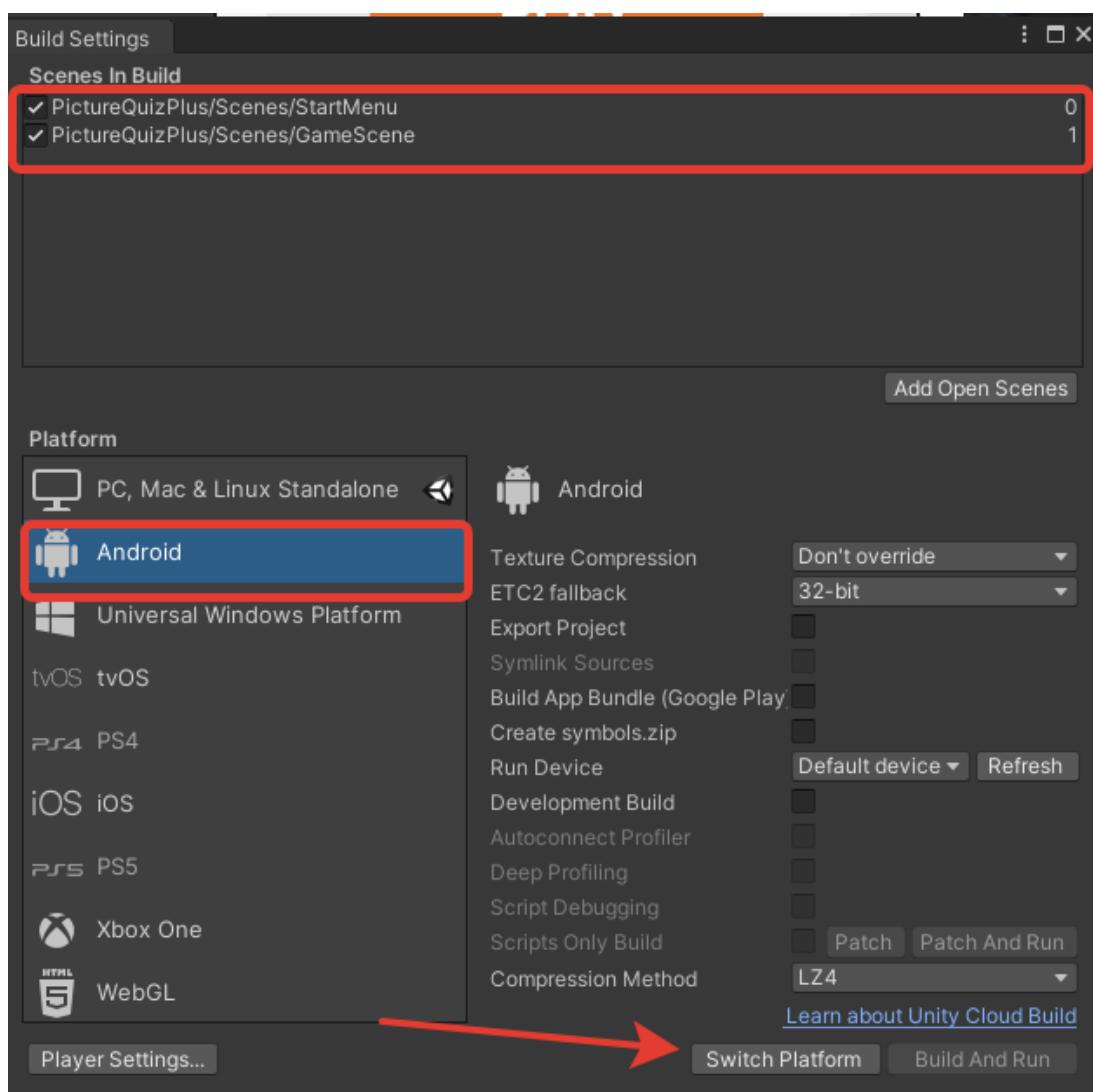
Picture behind the planks. By pressing the action button, the aim is launched, moving from edge to edge. By pressing the button a second time, a shot is fired, which costs a fixed number of coins. Mechanics with an aim is optional, it can be configured so that the planks are knocked down directly by clicking on them



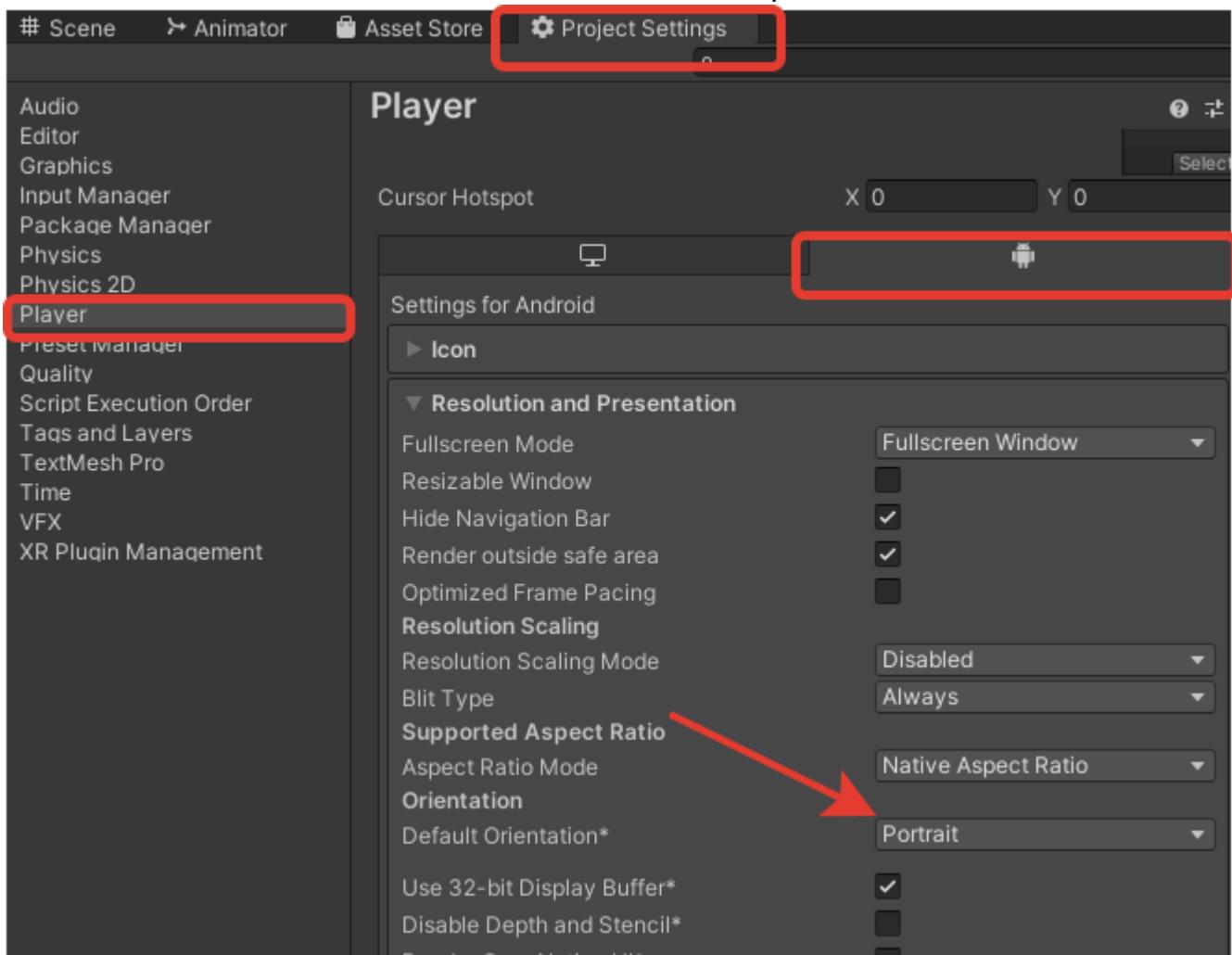
Four images united by one meaning

# FIRST STEPS

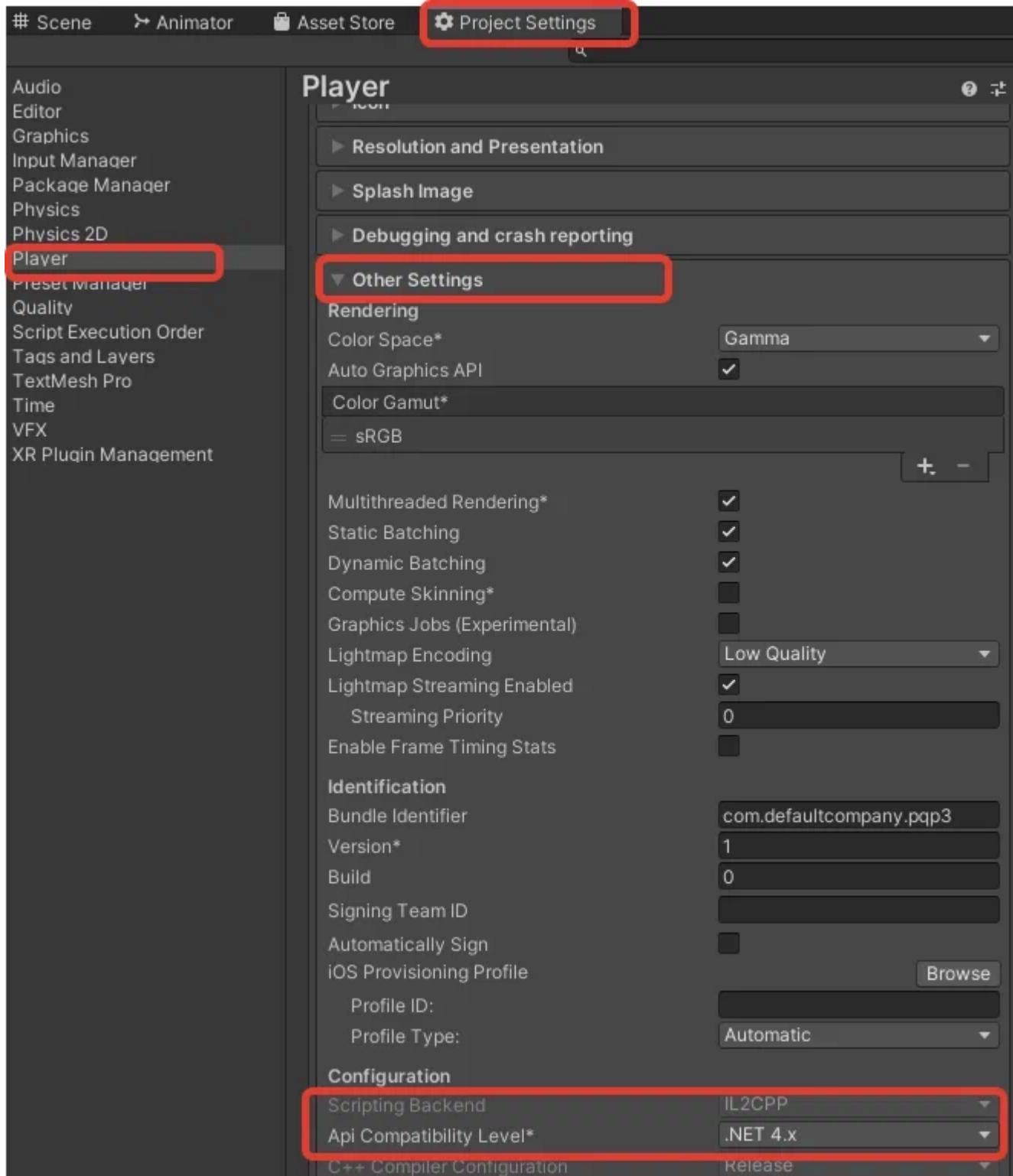
1. If you are reading this documentation you probably already imported the asset into your project. If not you need to find and import it from the *Window > Asset store* in the Editor or from the asset store website by clicking the *Import* button. Agree to all of the questions you meet in the process.
2. Go to *File > Build settings* and switch the platform to Android or iOS. Make sure *Scenes in Build* are presented in the following order.



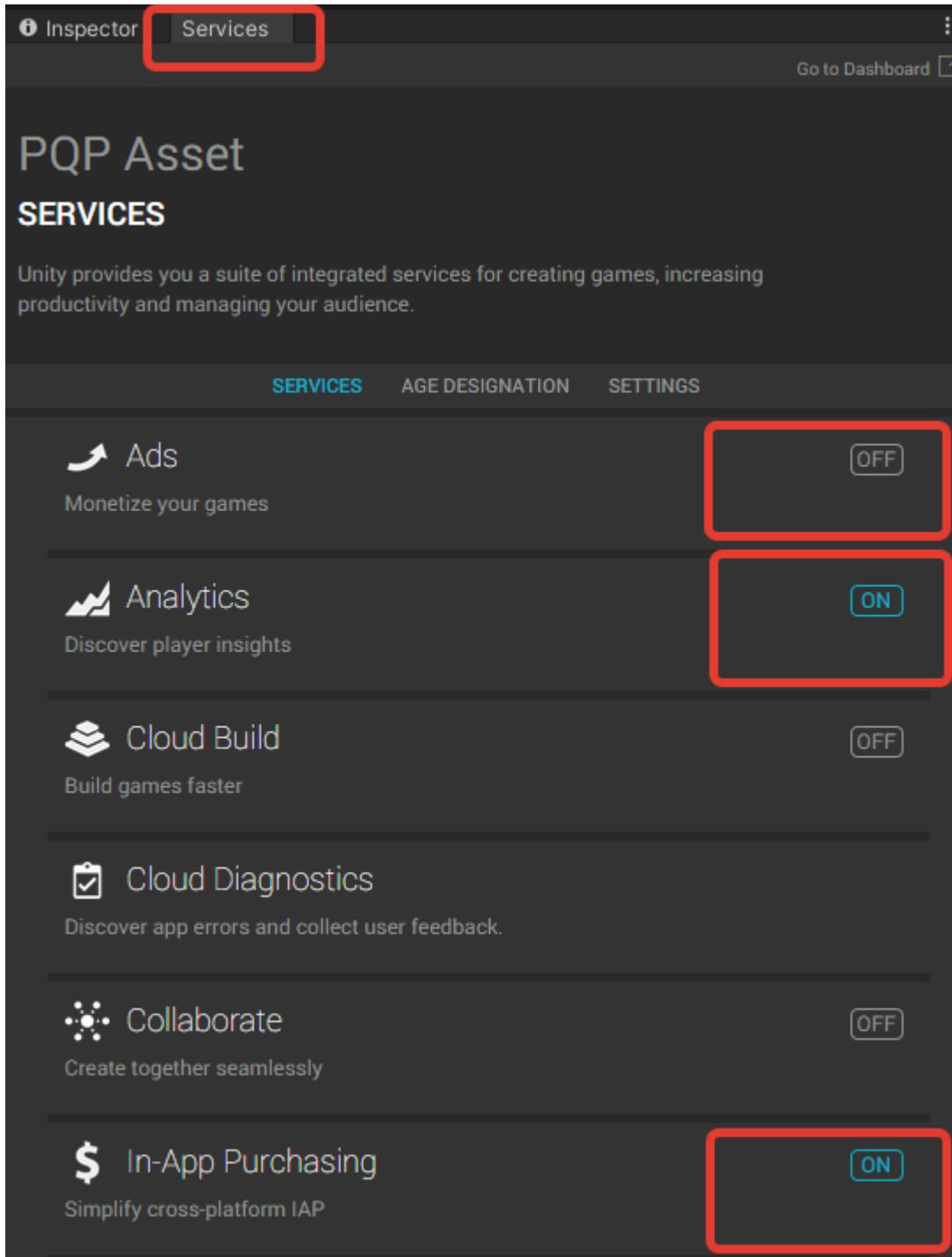
After switching, click *Player Settings*. In the opened window opt in the Portrait orientation for the chosen platform.



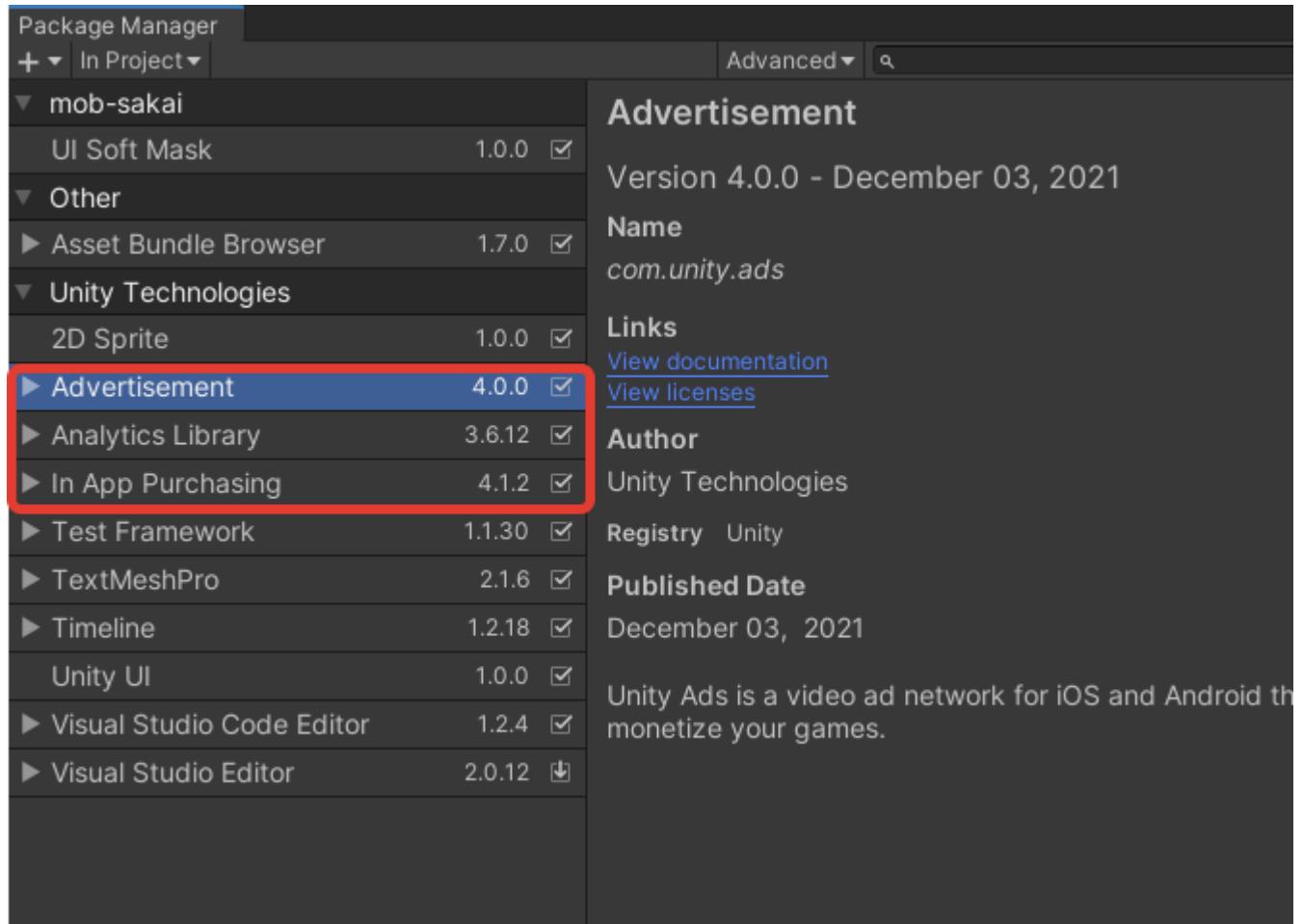
Make sure **IL2CPP** and **.NET 4.x** are chosen in the *Other settings* section



3. If you are planning to use Unity ADs or In App Purchasing in your game make sure you have one registered project in your unity dashboard <https://dashboard.unity3d.com/> and enable Unity analytics in the *Window > Services* tab.



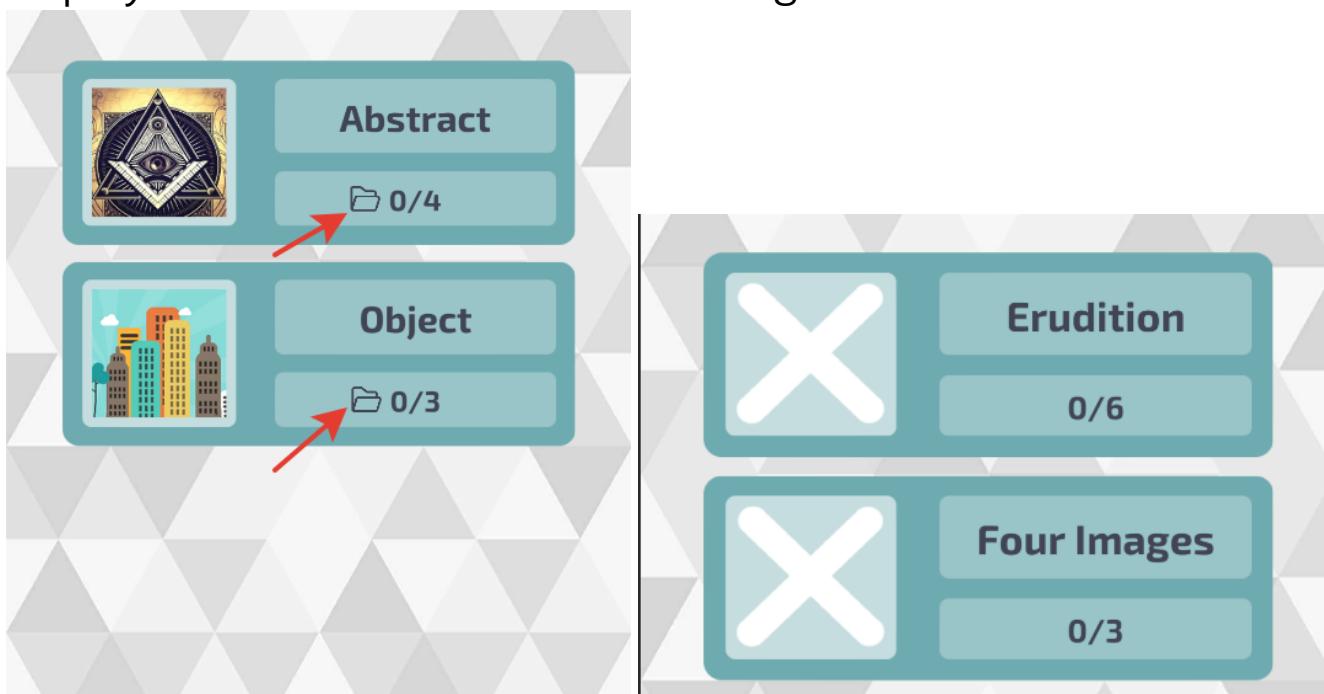
Make sure you have installed required packages with versions not lower than on the screenshot below. You'll find them by following *Window > Package Manager*. They are installed by default so if you are not planning to use Unity Ads or Unity In App Purchasing remove those packages.



# FILE STRUCTURE AND NAME CONVENTION

Most of the time you will be working with the *Resources* folder. It contains two folders: *content* and *details*.

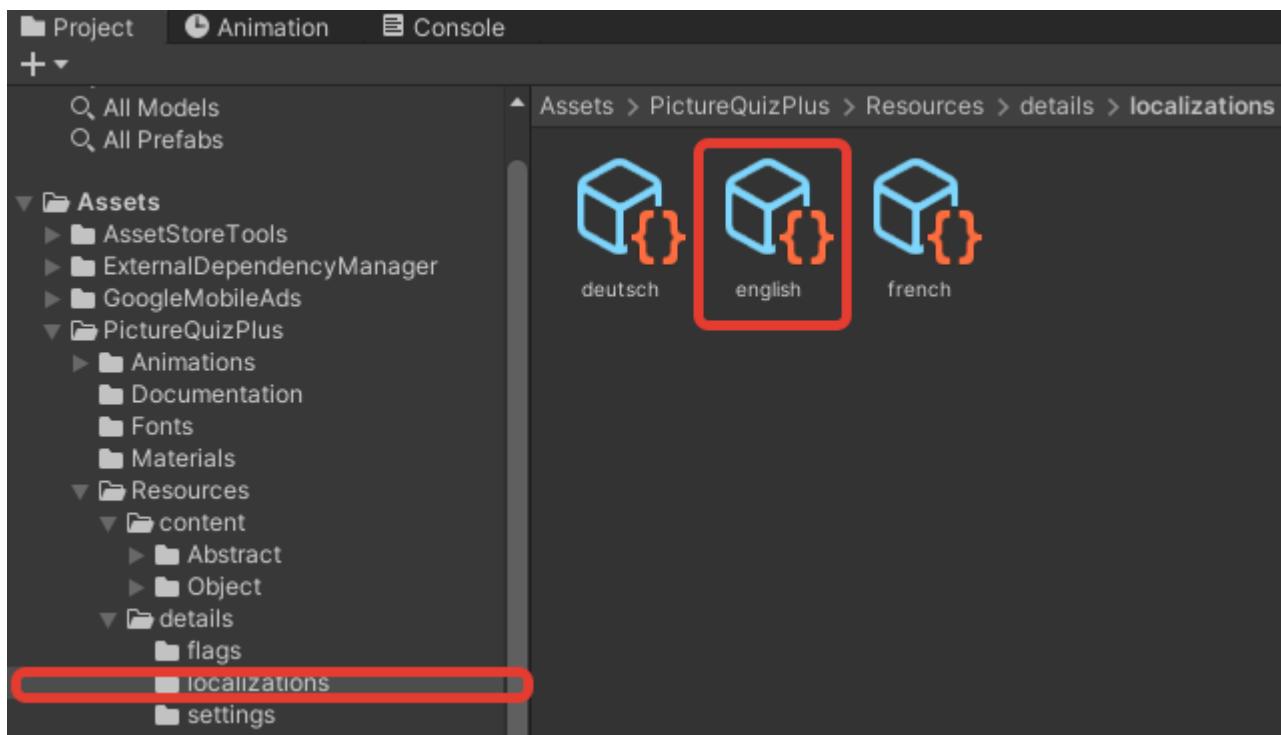
1. The *content* folder contains files of the content part of your levels, i.e. pictures. As well as icons of categories and subcategories, if necessary. By default, subcategories are enabled in the project, and when you open the content folder, you will see that at the first level there are folders of the Abstract and Object categories, which, in turn, have subcategories already nested. So far, only 1 nesting level is supported. In the game, supercategories will be displayed with a folder label. Subcategories will be unlabeled.



As you can see, the Abstract and Object folders contain files named *icon*. They are used for the icon on the category selection screen. Also, a file named *icon* can lie inside a subcategory, and then if this category does not contain tasks with pictures inside (all

tasks are only text), then this icon will also be used on the category selection screen. Image files in category folders must have number-names according to the in-game order. Task files with four pictures should be named as follows: the first file – the usual number 1, the second file – the number with an appendage 1\_2, the third 1\_3 and the fourth 1\_4.

2. The details folder contains settings and localization files. The first file to pay attention to is *details/settings>Loading* (can also be found following *Assets > PictureQuiz > Open Loading Settings*). This file is loaded first and contains information about available localizations and loading screen messages in the game. To open it, simply select it and all settings will appear in the Inspector tab. In the *Filename* field in the *Localizations* array element, enter the name of the localization file, which in turn is stored in *details/localizations*.



Inspector Services

Loading

Open

Mainstay parameters

Use remote server storage

Localizations

Size: 3

▼ English

Name	English
Filename	english

▼ Messages

Default Loading Bar Message	Loading...
Starting Message	Let's get started!
File Not Found Message	One of the resources was not found.
Unknown Error Message	Something went wrong.
Error Popup Title	Unable to continue

▼ Localized Loading Steps

Size: 5

▼ Element 0

Type	Settings
Loading Message	Loading Settings...
Error Message	Something went wrong while loading game settings.

▼ Element 1

Type	Resources
Loading Message	Loading Resources...
Error Message	Something went wrong while loading resources.

▼ Element 2

Type	Game_data
Loading Message	Loading Game Data...
Error Message	Something went wrong while loading game data.

▼ Element 3

Type	Internet_connection
Loading Message	Establishing Internet Connection...
Error Message	Please check your internet connection and hit retry!

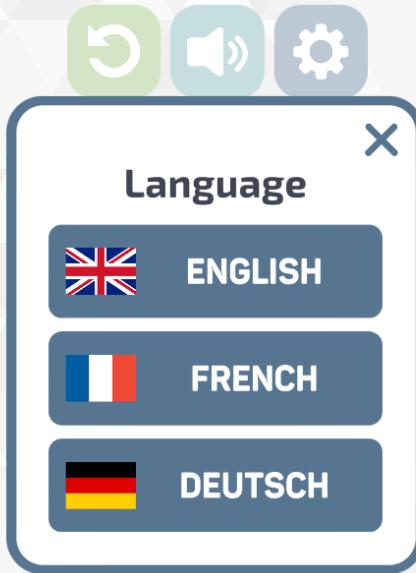
▼ Element 4

Type	Host_connection
Loading Message	Establishing Host Connection...
Error Message	Something went wrong while establishing connection w

► French

► Deutsch

3. The *Name* field will be displayed in the language selection popup.

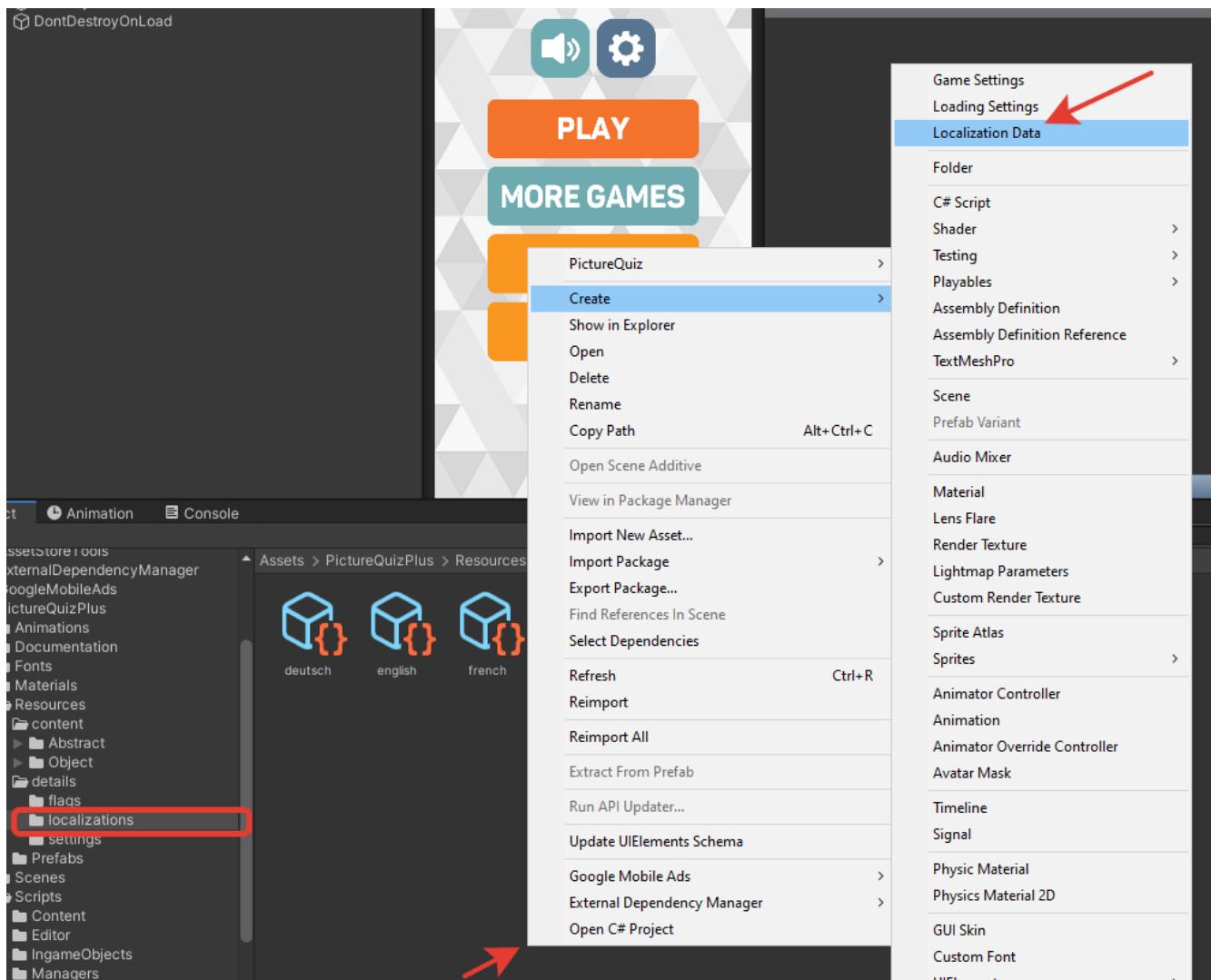


*Loading* and *Error message* translations must be completed for all localizations featured in the game. To add a localization, simply increase the *Size* field by 1 and press *Enter*. To remove localization, right-click on it and click *Delete array element*. If you want to reset all localizations type 0 and press enter, then one localization will be added with all default values in English. At least one localization must always be added. A popup with a choice of languages will be available only if there is more than 1 localization in the game.

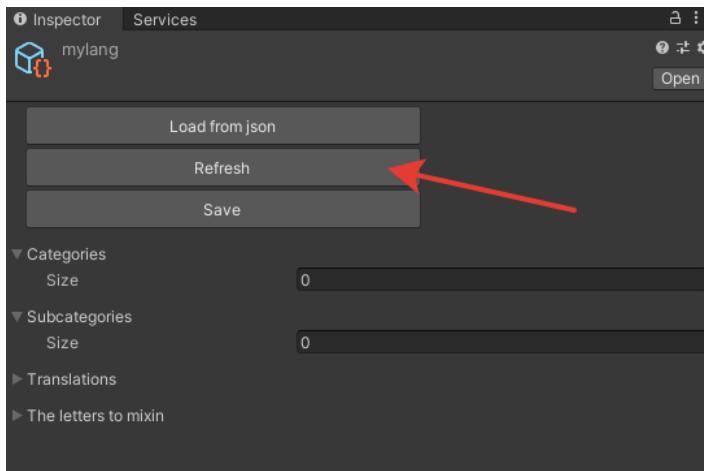
4. The details/flags folder should contain flag image files with names that match the names of the localization files themselves. More details about setting up localizations will be discussed later.

# TASKS SETUP

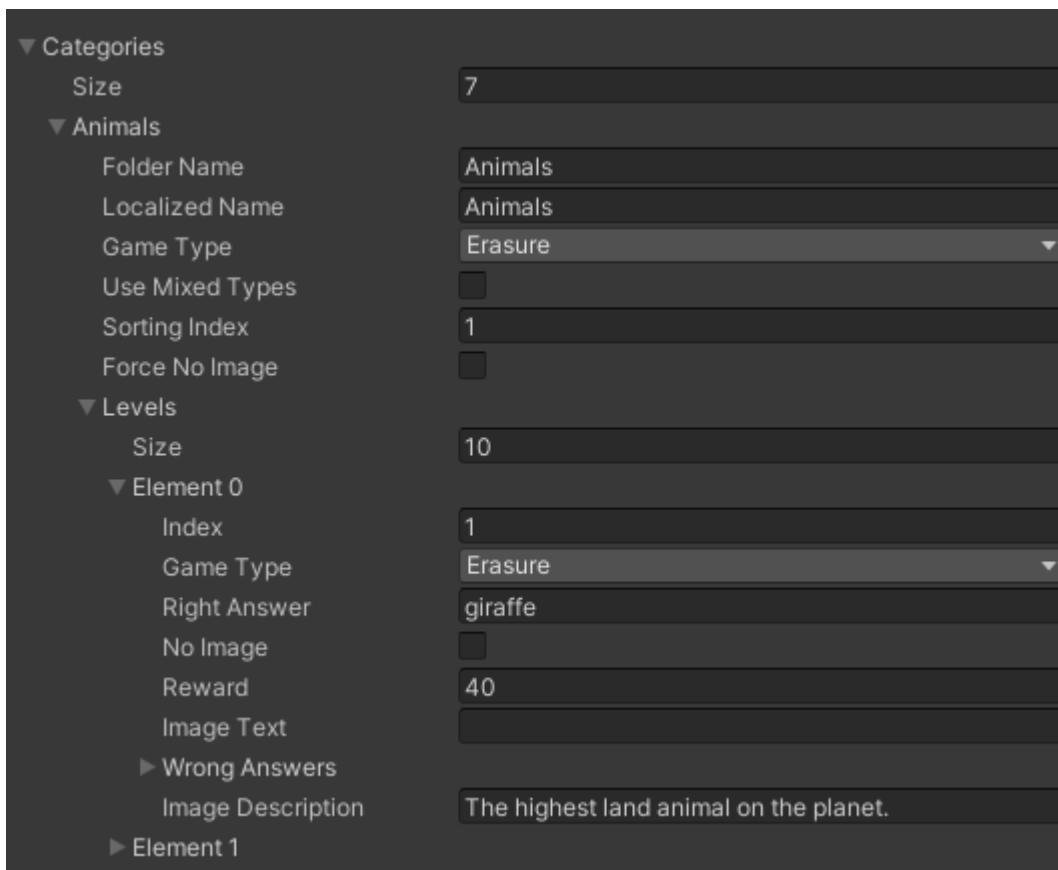
Once you have formed the file structure in the *content* folder, you can start setting up the levels of your game. To do this, in the *details/localizations* folder, right-click and select *Create > Localization Data*



Give the file a friendly short name and go to the *Inspector* tab. Click *Refresh* and the information from the file structure will automatically fill in the fields of categories and subcategories.



If you are migrating from an older project you can load data from json by clicking *Load from json*.



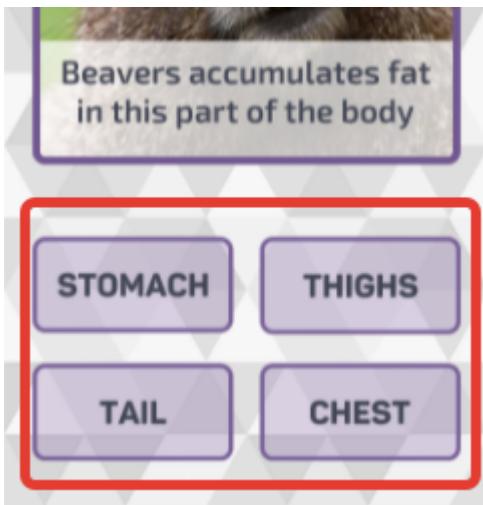
In each element of the *Categories* array, you need to fill in the fields:

1. *Localized Name* - category name on category selection screen

2. *Game Type* - works in conjunction with *Use Mixed Types*. If *Use Mixed Types* is off, then all levels in this category will use the *Game Type* selected in the category
3. *Sorting Index* - in what order the categories will be presented on the category selection screen
4. *Force No Image* - if enabled, pictures will be disabled in all levels (when using only text tasks)
5. *Levels* - category levels. In each of them you need to fill in the fields:
  - a. *Index* - must match the file name of the image (if any)
  - b. *Reward* - number of coins for passing the level
  - c. *Game Type* - if *Use Mixed Types* is enabled in the category, then the game type from this field will be used for the level
  - d. *Right answer* - answer to the level task
  - e. *No Image* - level without picture (text one)
  - f. *Image Text* - text to be rendered over the image



- g. *Wrong Answers* - if you want this task to be with four answer options,

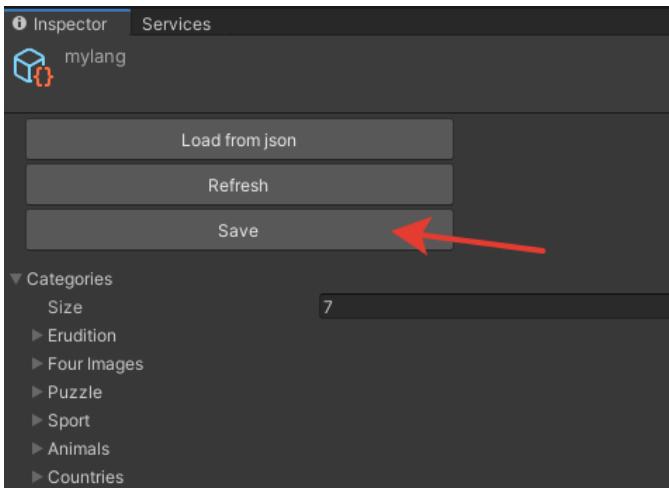


then enter the number 3 in the field and press Enter. Complete three incorrect answers.

- h. *Image Description* – after the level, the player can press a special button to find out some additional information. Fill in this field and the button will appear

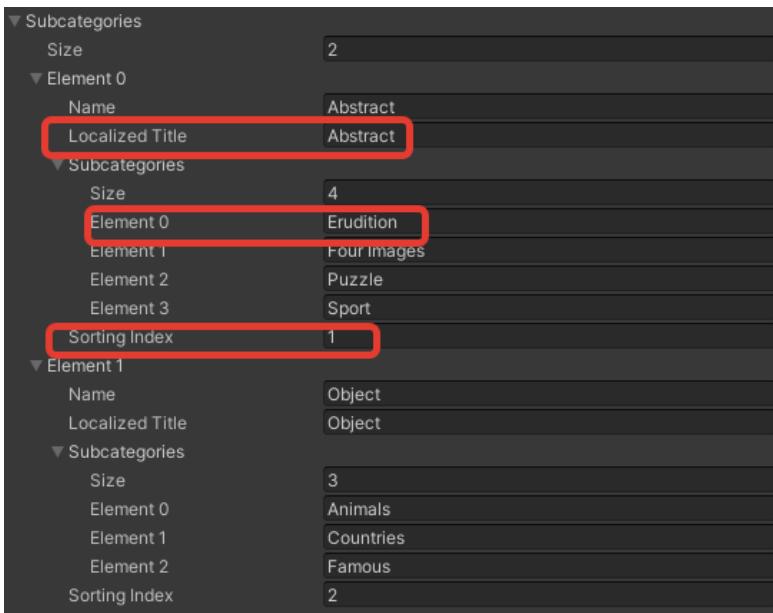


When you fill in all the fields in the categories – click **Save**.  
**Click Save every time you make changes to localization files.**



If you use subcategories, then the fields in the Subcategories section will be filled in automatically. Correct the following fields if necessary:

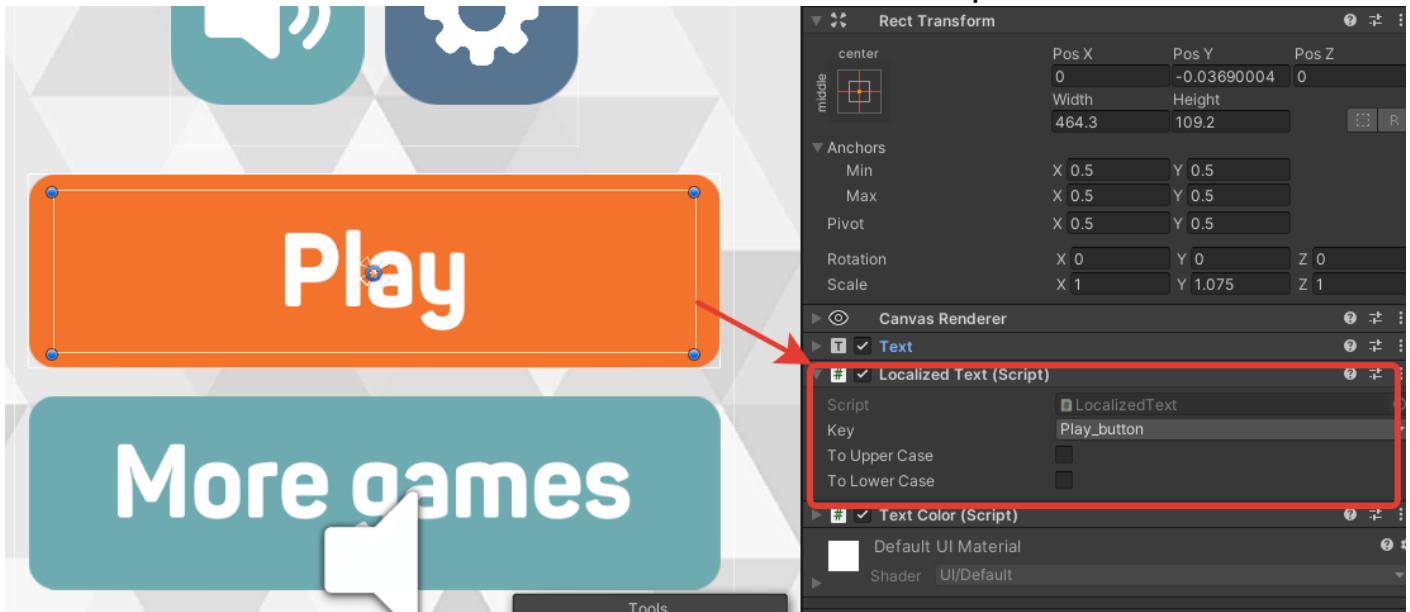
1. *Localized Title* - the name of the category that will be displayed on the category selection screen
  2. *Sorting Index* - order on the category selection screen
  3. *Subcategories* - folder names of subcategories included in the category



# Localization

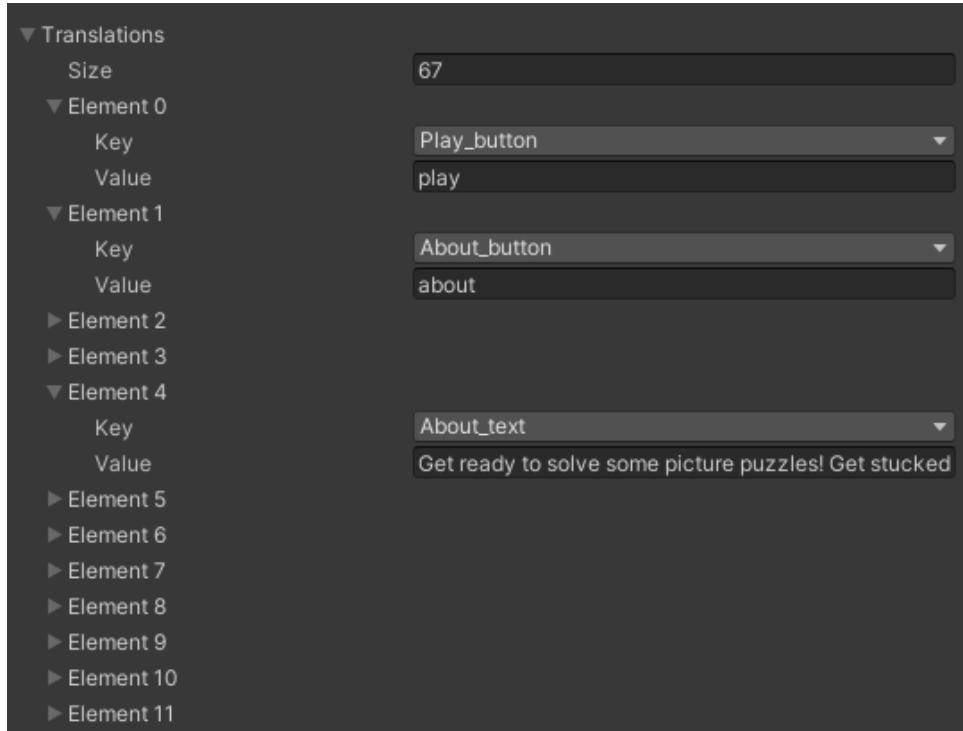
DO NOT FORGET TO ADD LOCALIZATION YOU CREATED IN PREVIOUS STEP TO LOADING SETTINGS! [MQ+ Documentation](#)

Most text elements have a *Localized Text* script attached.



Toggle *To Upper* or *To Lower Case* and this text transformations will be applied at runtime.

By choosing a key in the *Key* dropdown of the *Localized Text* script, you designate the translation to be used. Translations for in-game elements are all assigned in the same file you created, in the *Translations* section. To reset to defaults, enter zero in the *Size* field and press *Enter*.



You can combine different translations in one. To do this, when assigning a translation to an element, you can specify a key from another element in double curly braces. For example, if you have a *base\_button* key, then you can use it in another element



You can also use this scheme in the description of the buttons of the IAP products

In App Products	
Size	3
▼ coins.500	
Product Id	coins.500
Coins Reward	500
Button Description	500 {{coins}}
Icon	coins_2_padding
▼ coins.1500	
Product Id	coins.1500
Coins Reward	1500
Button Description	1300 + 200 {{bonus}}
Icon	coins_3
▼ coins.3000	
Product Id	coins.3000
Coins Reward	3000
Button Description	2500 + 500 {{bonus}}
Icon	coins_4

In addition, there are reserved words.

{{category}} - substitute the name of the current category in this place. For example, this can be used in the text when sharing

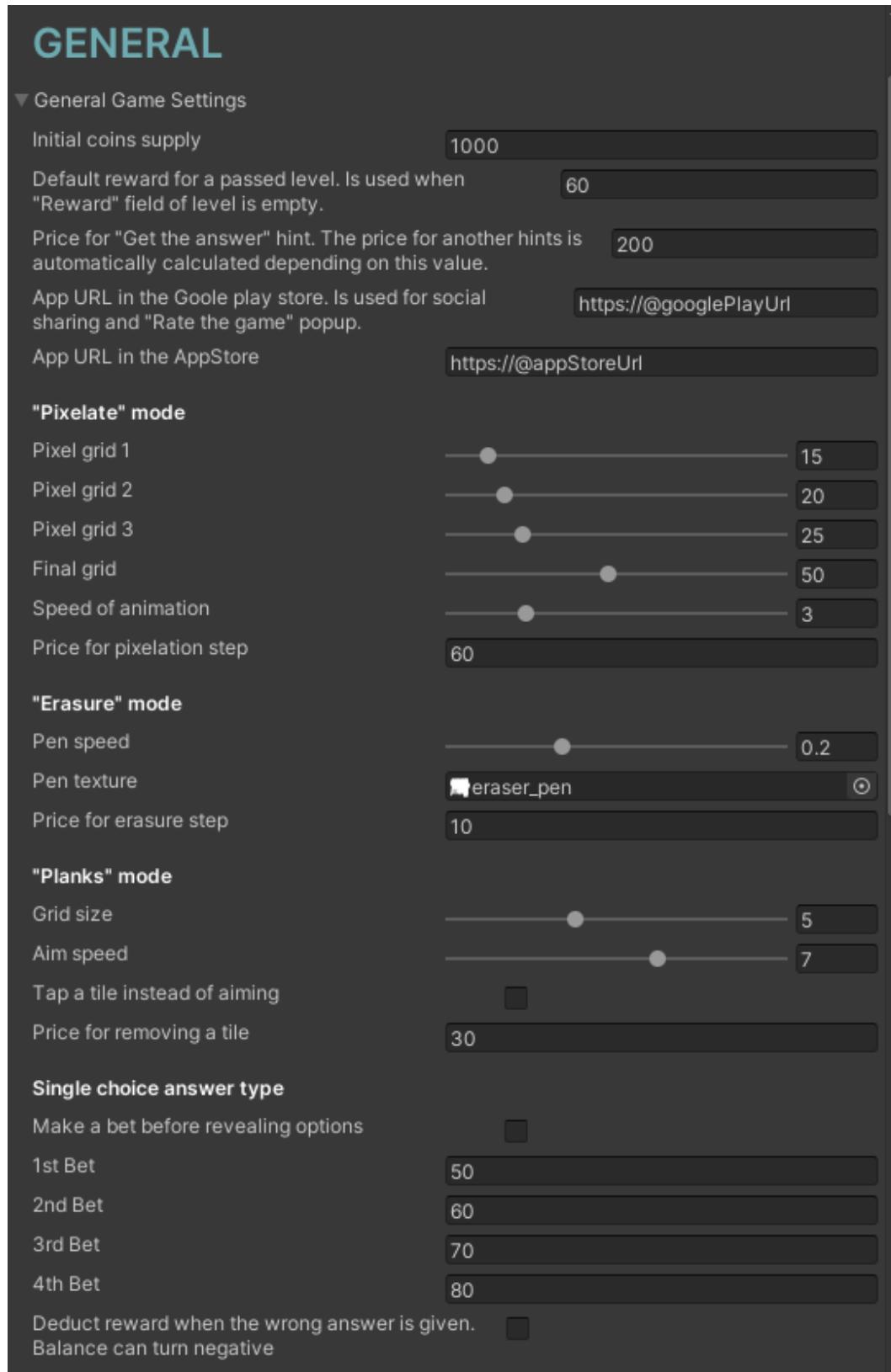
▼ Element 34	
Key	Sharing_text
Value	Please help me to complete the level in the category {{category}}!
▼ Element 35	

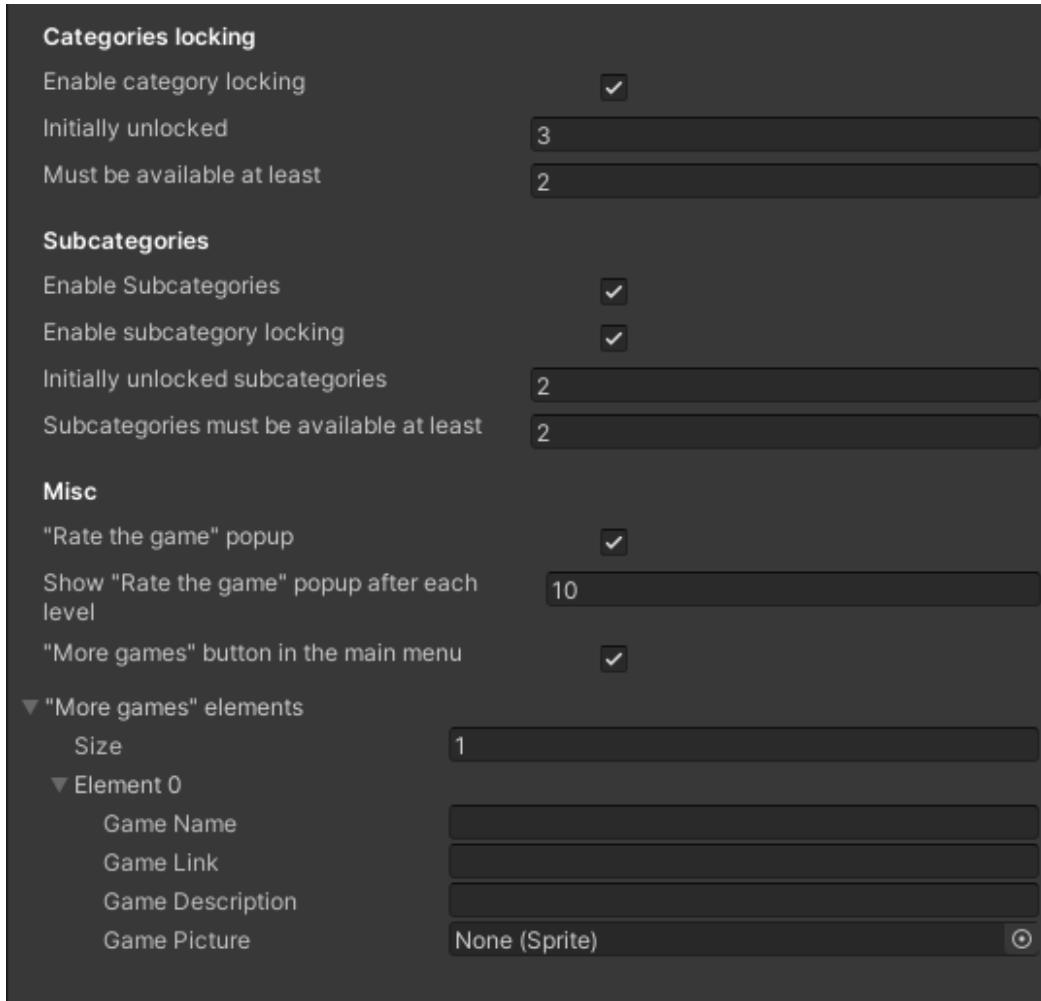
In the same file fill in the letters that will be mixed into the tasks with the *input* answer type

▼ The letters to mixin	
Size	16
Element 0	y
Element 1	b
Element 2	k
Element 3	w
Element 4	t
Element 5	r
Element 6	j
Element 7	v
Element 8	u
Element 9	c
Element 10	q
Element 11	i
Element 12	z
Element 13	x
Element 14	l
Element 15	p

# GENERAL SETTINGS

From the menu, click *Assets > PictureQuiz > Open Game Settings*.  
In the *Inspector* tab, set up the game.





680

Beavers accumulates fat in this part of the body

**BET**

50	60
70	80

*Make a bet before revealing options* – an option in which, before showing the answer options, the player first makes a bet, and in case of victory, he receives the bet back and the same number of coins on top. If his answer was wrong, he loses the bet coins.



*Categories locking* - categories are locked until several open ones have been completed

To clear game saves and PlayerPrefs in the menu, click *Assets > Picture Quiz > Clear Saved Data*

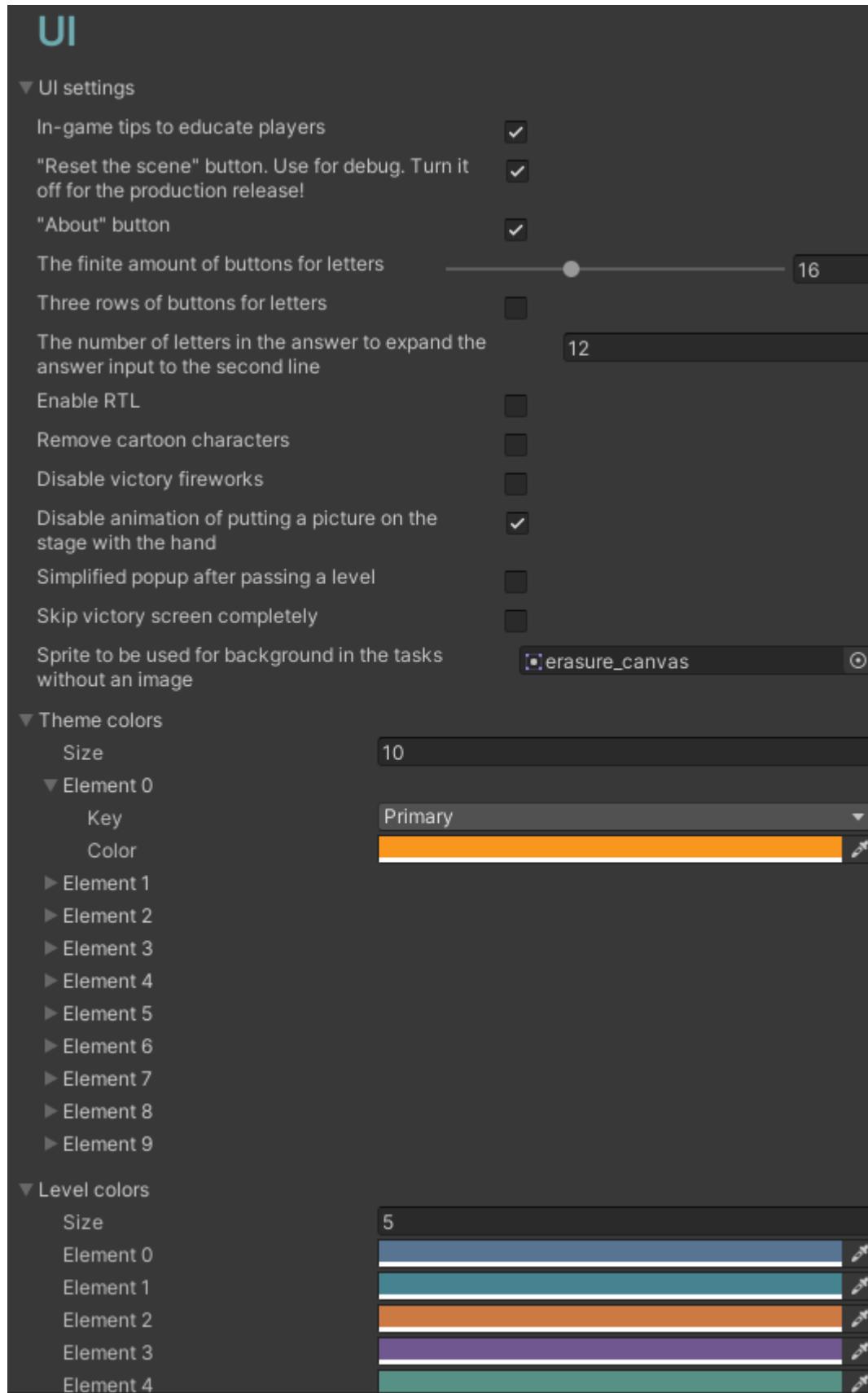
Hints prices are calculated with the help of few magic constants in methods *PrepareInputModeState* and *PrepareSingleChoiceModeState* that could be found in the file

*PictureQuizPlus\Scripts\Managers\LevelStateController.cs*

Feel free to edit and test formulas

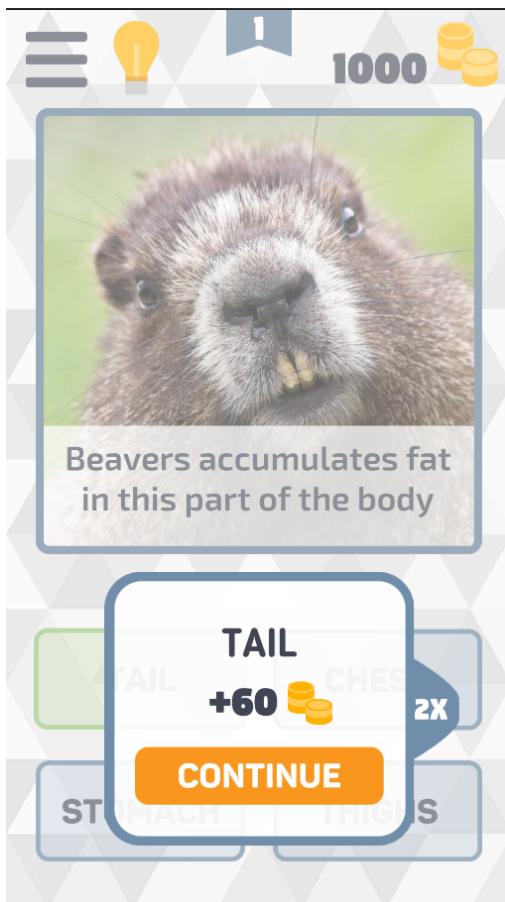
# UI SETTINGS

From the menu, click *Assets > PictureQuiz > Open Game Settings*. In the Inspector tab, set up the game.

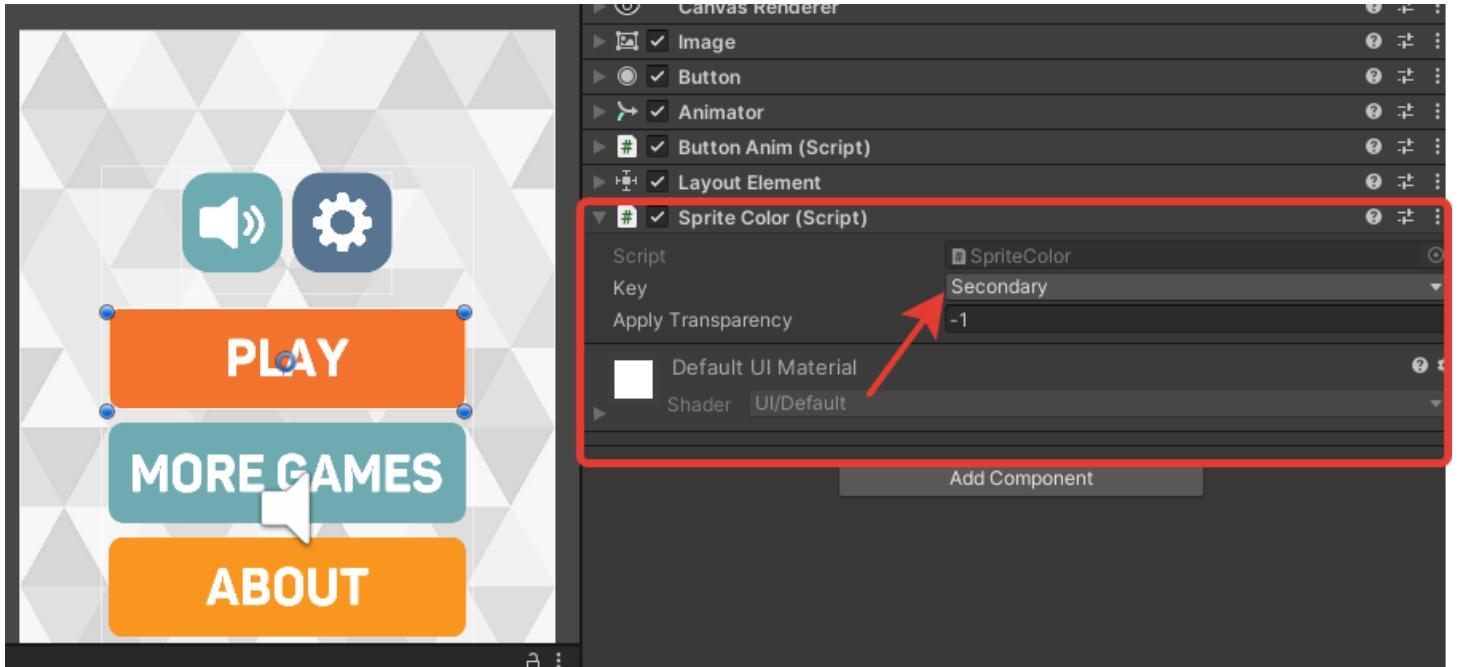




*In game tips to educate players – tooltips to show the player how to use the game. If the player has already seen the hint, it is no longer shown to him. Hint texts are assigned in the localization file*



Simplified victory popup

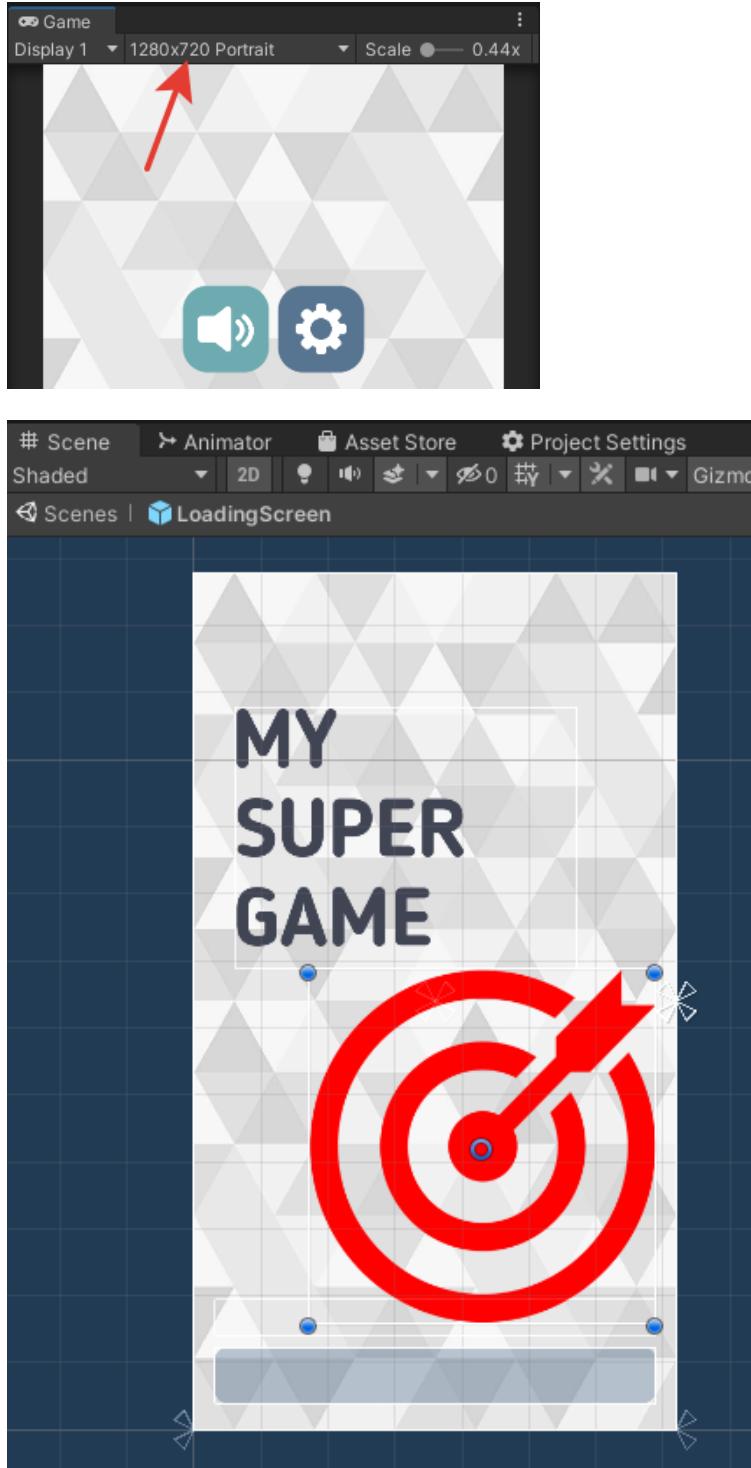


All elements in the game to which colors are applied have a script in their components that applies a color to them from a color scheme configured using *Theme Colors*. After making changes to the theme colors, the color will be applied automatically to all objects in the scene. To reset all colors to their default colors, enter 0 in the *Size* field and press enter.



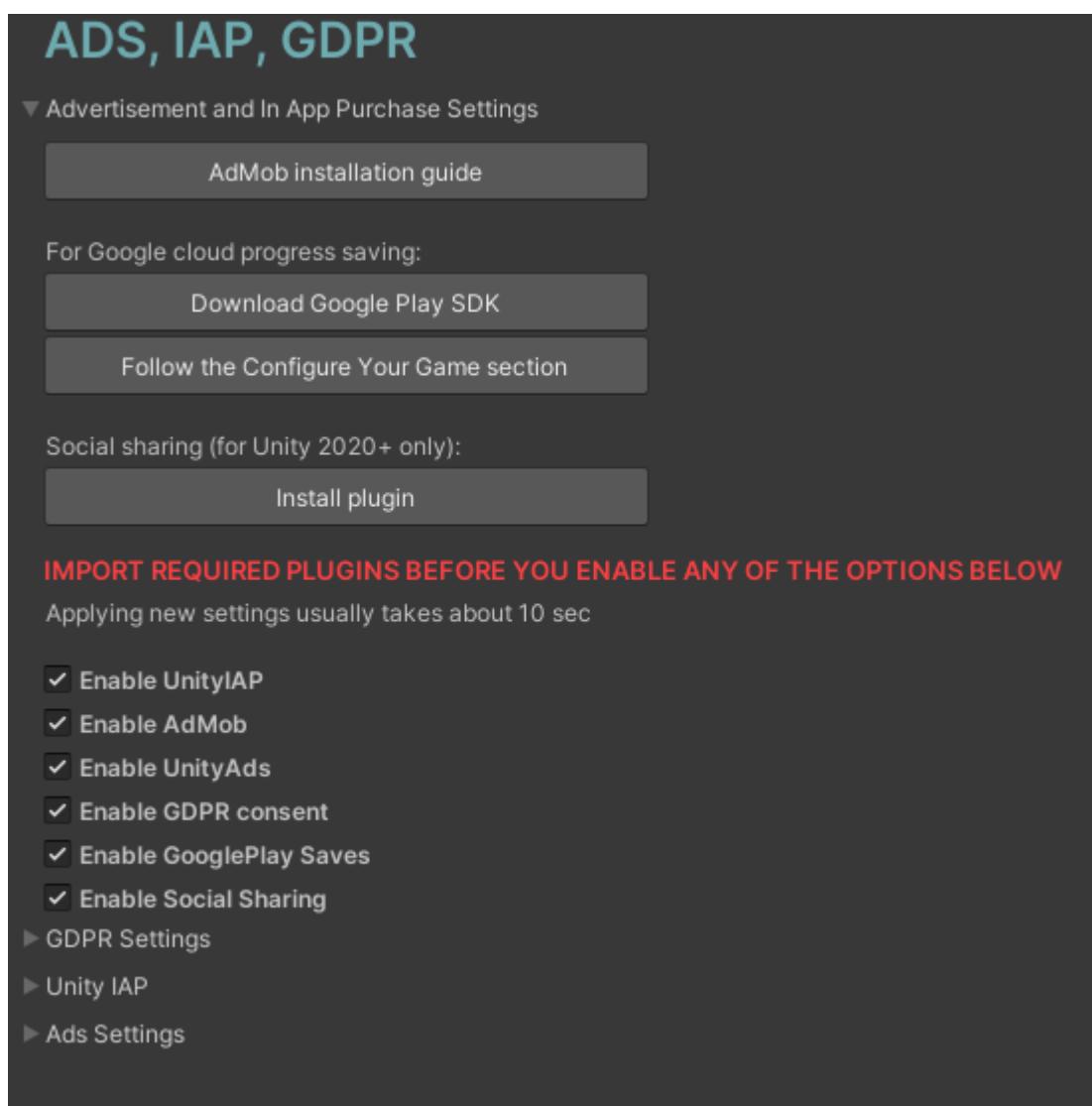
The colors from the *Level colors* section are applied to some of the elements in the level scene. The current color is chosen randomly during level loading.

To edit loading screen(or other prefabs) you should toggle display resolution in the *Game* tab to 1280x720 and double click *Resources/Prefabs>LoadingScreen* prefab. Feel free to customize texts, images but be careful with loading bar to not broke its functionality



# ADVERTISEMENT, IN-APP PURCHASING, GDPR, SOCIAL SHARING

From the menu, click *Assets > PictureQuiz > Open Game Settings*. In the *Inspector* tab, set up the game.



Before activating *Enable UnityIAP* or *Enable UnityAds*:

- follow the instructions from chapter [FIRST STEPS](#) p.3 [If you are planning to use Unity ADs or In App Purchasing...](#)

Before activating *Enable AdMob*:

- click **AdMob Installation guide** and follow the instructions

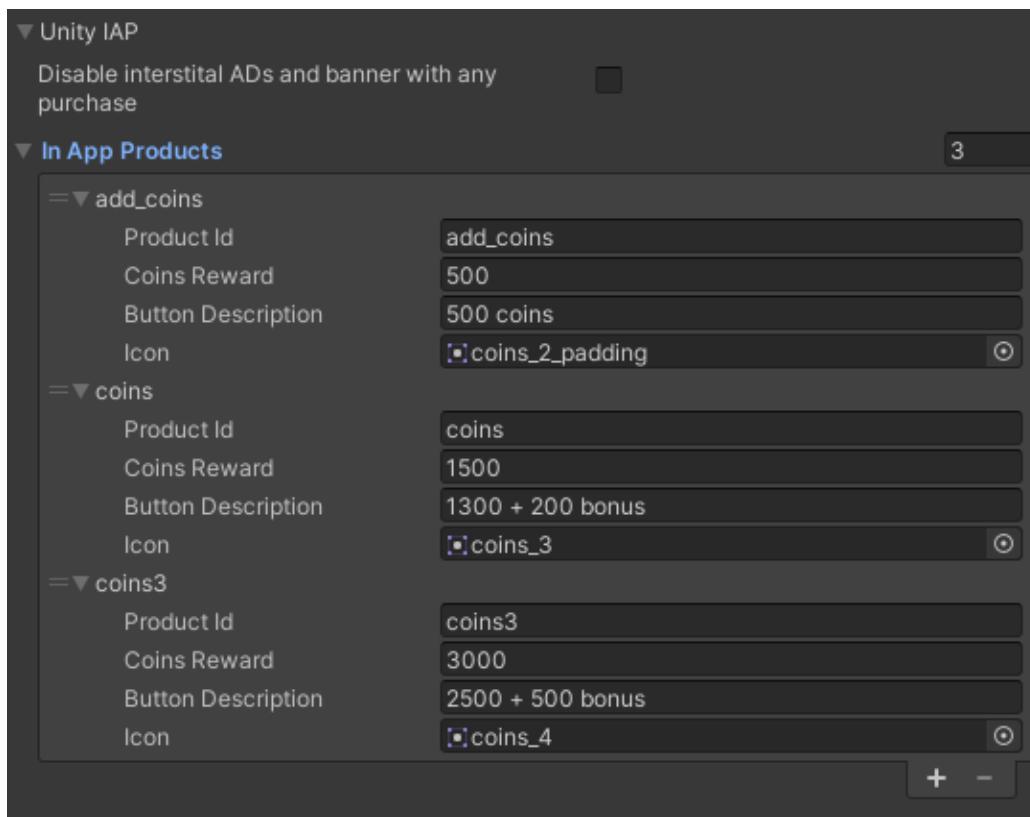
Before activating *Enable GooglePlaySaves*:

- import sdk by clicking **Download Google play SDK**;
- click **Follow the Configure Your Game section**

Before activating *Enable Social Sharing*:

- click **Install plugin**

# UnityIAP

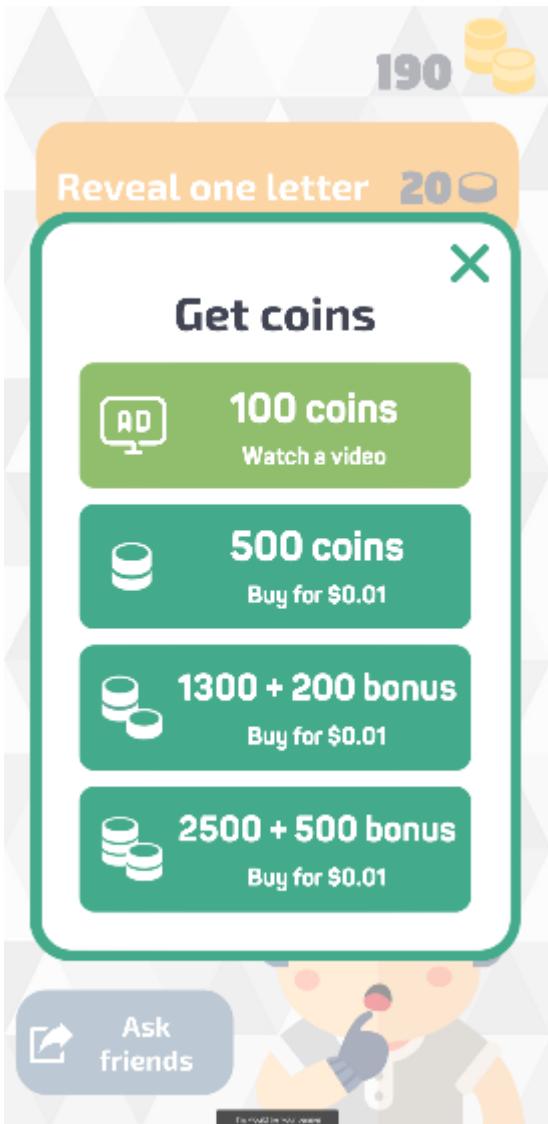


Product Id should be taken from your platform dev console

The screenshot shows the Google Play Developer Console under the 'Monetize' tab. The 'Products' section is selected, and the 'In-app products' sub-section is highlighted. A search bar is at the top right.

Product name	Product ID
Сундук монет	coins3
1000 монет	coins2
Мешочек монет	coins
Горстка монет	add_coins

The 'coins3' product ID is circled in red.



*Button Description* and *Icon* are used for buttons in monetization popup. Product prices are taken from dev console automatically

# Advertisements

▼ Ads Settings

"Multiply reward by watching an AD" button after passing a level

"Multiply reward" multiplier  2

Reward for watching an AD 100

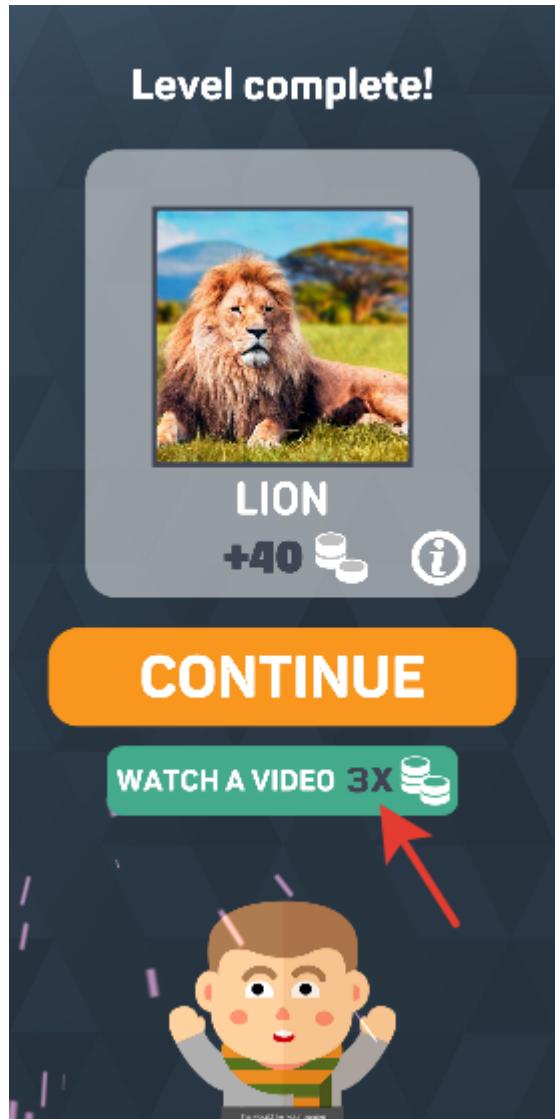
Delay between ADs (hh:mm:ss). Must be 5 sec at least to have time to load 00:00:05

Show interstitial AD after each X level 5

Show banner

Show banner on each X level 1

Banner position on the top



*"Multiply reward"* button.  $40 \times 3 = 120$  coins after watching an AD

# Unity Ads

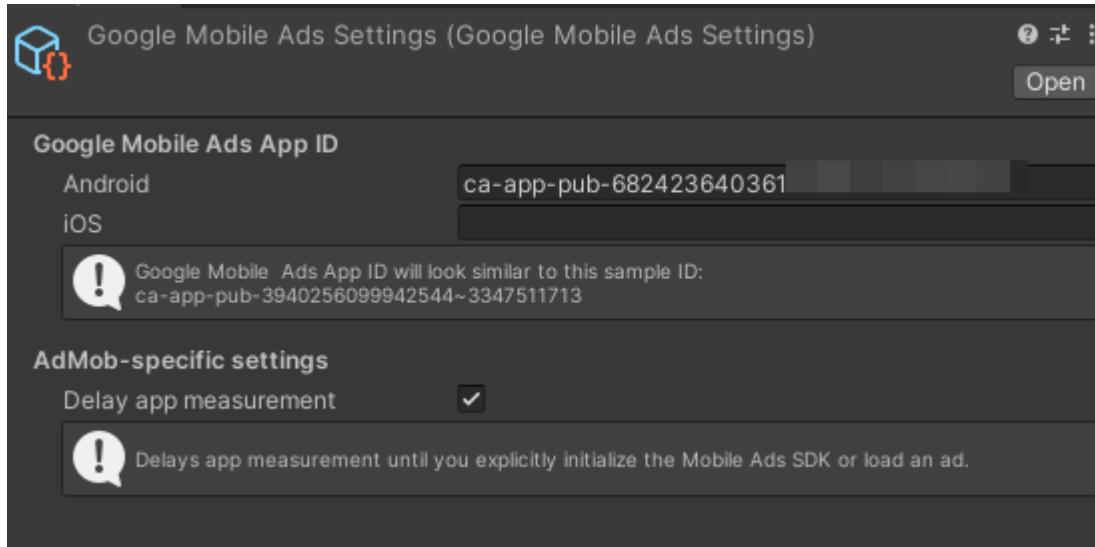
Unity Ads	
<b>Android settings</b>	
Google Play Store Game ID	3244417
Rewarded ID	Android_Rewarded
Interstitial ID	Android_Interstitial
Banner ID	Android_Banner
<b>iOS settings</b>	
Apple App Store Game ID	3244416
Rewarded ID	iOS_Rewarded
Interstitial ID	iOS_Interstitial
Banner ID	iOS_Banner

Take values from your Unity dashboard > *Monetization* section

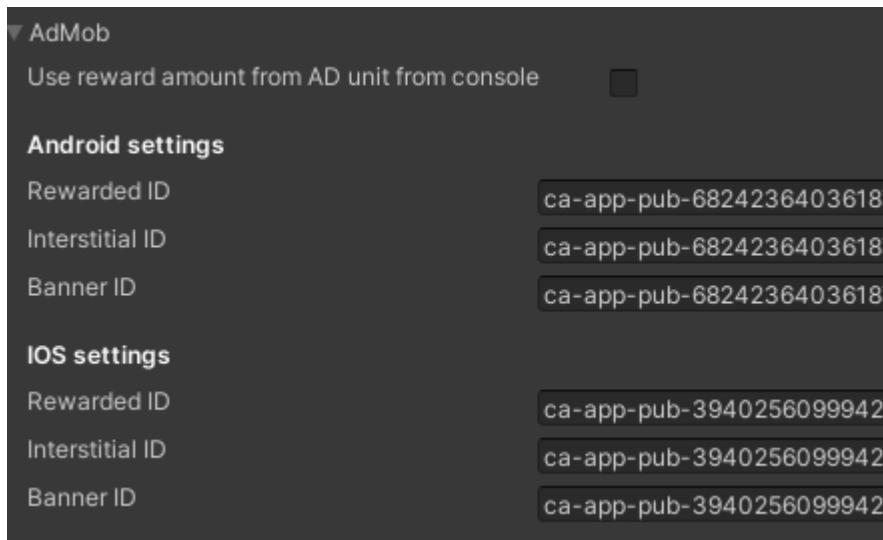
The screenshot shows the Unity Monetization dashboard. On the left, there's a sidebar with navigation links: Monetization (selected), Project Overview, Ad Units (highlighted with a red arrow), Unity Ads Reporting, Ad Controls, Settings, Organization Overview, Unity Ads Reporting, Ad Controls, Mediation (Beta), Setup, Email & CSV Export, Geo Collections, Finance, Test Devices, API Management, Organization Settings, About & Support. The main content area is titled "Ad Units". It has a section "What are Ad Units?" with a description and a "Learn More" link. Below this, it shows "Game IDs:" with two entries: an Apple icon followed by "3244416" and an Android icon followed by "3244417". A red box highlights these two entries. Below the game IDs, there are tabs for "ALL" (9), REWARDED (4), INTERSTITIAL (4), and BANNER (1). A "Platform" dropdown is set to "Platform". The "Ad Unit (9/20)" section lists two items: "iOS Interstitial" with ID "iOS\_Interstitial" and "iOS Rewarded" with ID "iOS\_Rewarded". Both items have a red box highlighting their respective ID fields.

# AdMob

Approved support for 6.x versions. To enter your app id follow *Assets > Google Mobile Ads > Settings*.



Then take IDs from your admob console



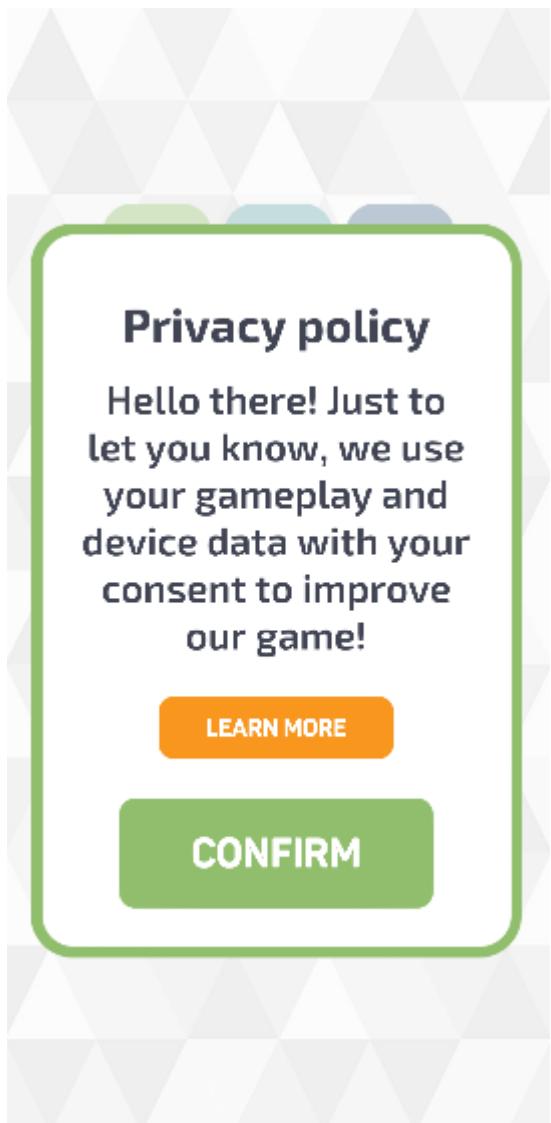
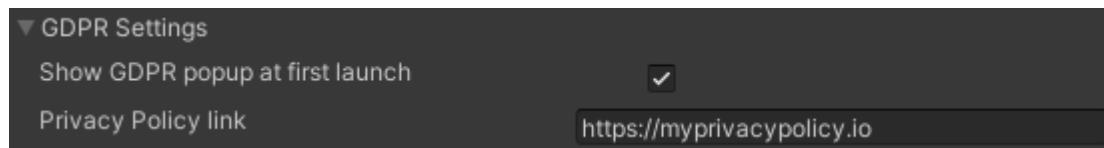
The screenshot shows the AdMob dashboard for an app. On the left, a sidebar lists various sections: Apps, App overview, Ad units (highlighted with a red arrow), Blocking controls, App settings, Reports, Mediation, Campaigns, Policy center, Privacy & messaging, and Blocking controls. The main area is titled 'Add ad unit' and contains a search bar, a 'Filtered report' dropdown, and a 'Remove' button. Below the search bar is a table listing four ad units:

Ad unit	Ad format
Banner ca-app-pub-6824236403618	Banner
coins ca-app-pub-6824236403618	Rewarded
prost ca-app-pub-6824236403618	Interstitial
rewarded_2 ca-app-pub-682423640361	Rewarded

# GDPR

<https://gdpr.eu/what-is-gdpr/>

Require enabled Services > Unity Analytics



Enabled *Show GDPR popup* option forces unskippable popup to appear at the first game launch. *Learn more* button opens a specified *Privacy Policy link* in the browser. You should host somewhere a simple file with your policy and paste a link to it in the given field. Example file could be found in the *PictureQuizPlus/Documentation* folder.

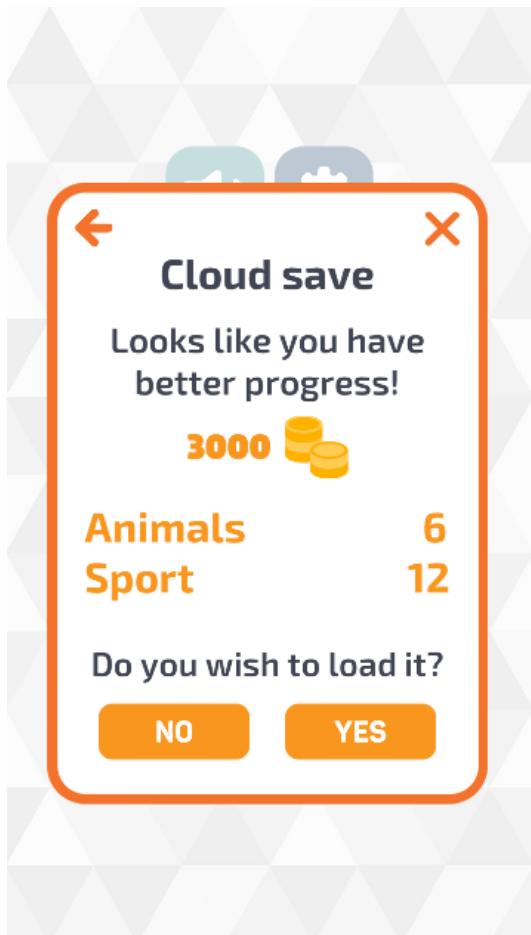
## Social sharing

After clicking on the button, the hints popup closes and a screenshot of the playing field is taken, followed by a native offer to share using the applications and social networks installed on the device



# Cloud saving

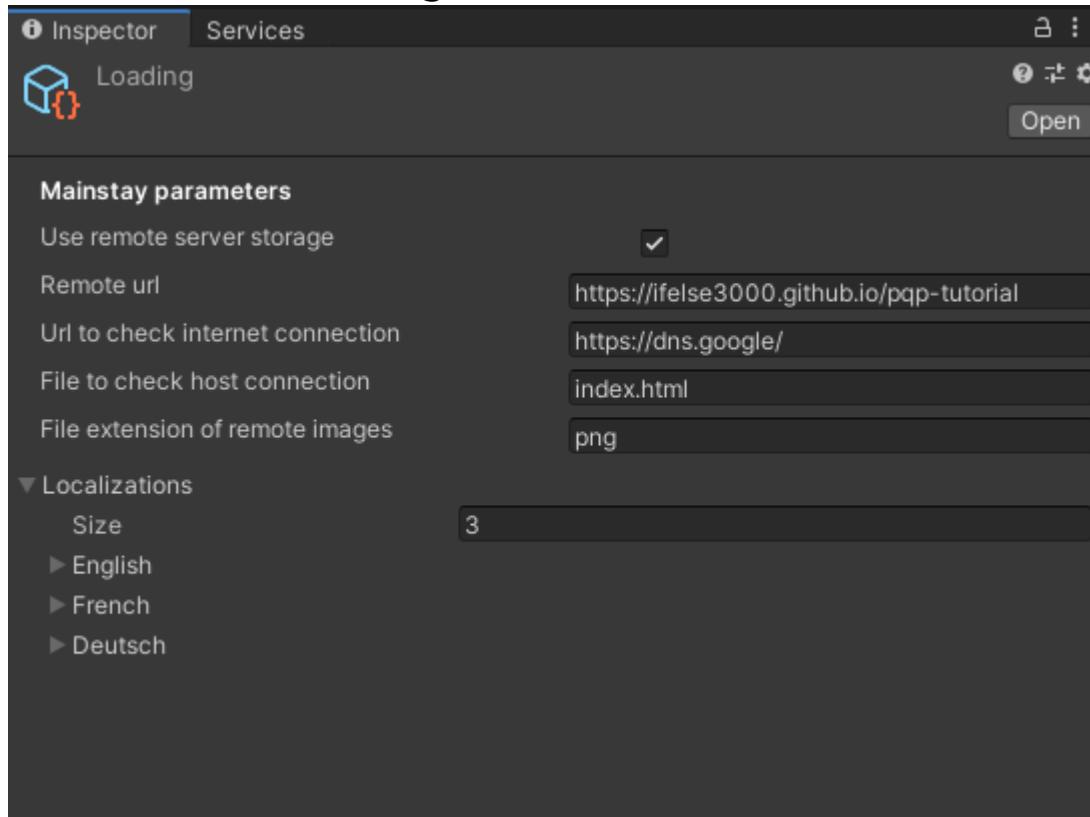
For now only Google Play Games are supported.



If better progress from the cloud is detected, a popup appears.

# WEB SERVER STORAGE

If you have an http server that can serve files and in which you can set up routing, then you can use it to supply the player with localizations and settings via internet connection. Free and convenient hosting of GitHub Pages statics is also suitable. Open *Assets > PictureQuiz > Open Loading Settings* and enable *Use Remote server storage*



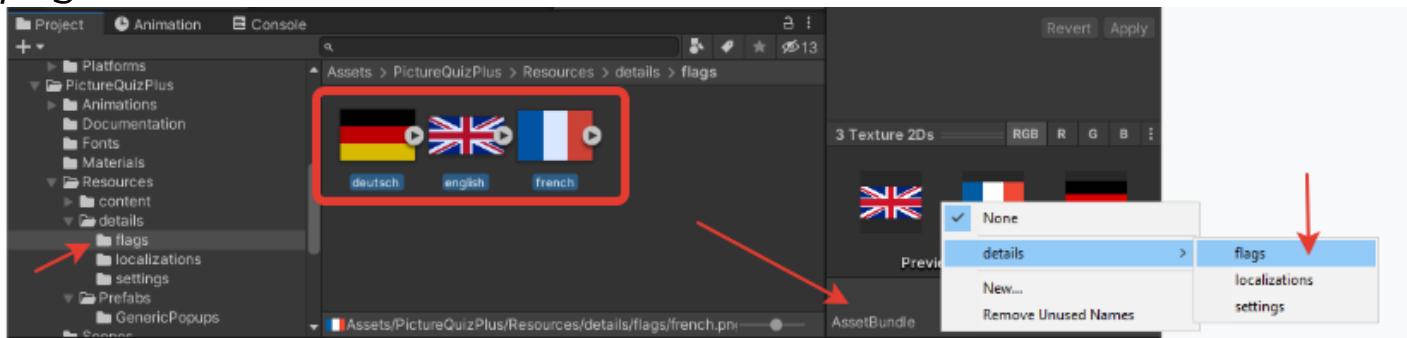
*Remote Url* is the root path to the folder in which the necessary folders and files are located (which ones, see below)

*File to check host connection* is the file that the engine will try to download when the game is loaded to confirm that the host is available

Unlike local storage, all images (including icons and flags) on the server must have the same extension, such as *png*

# File preparation

Select all the flag files in the *details/flags* folder and in the *Inspector* at the bottom assign them an Asset bundle named *details > flags*



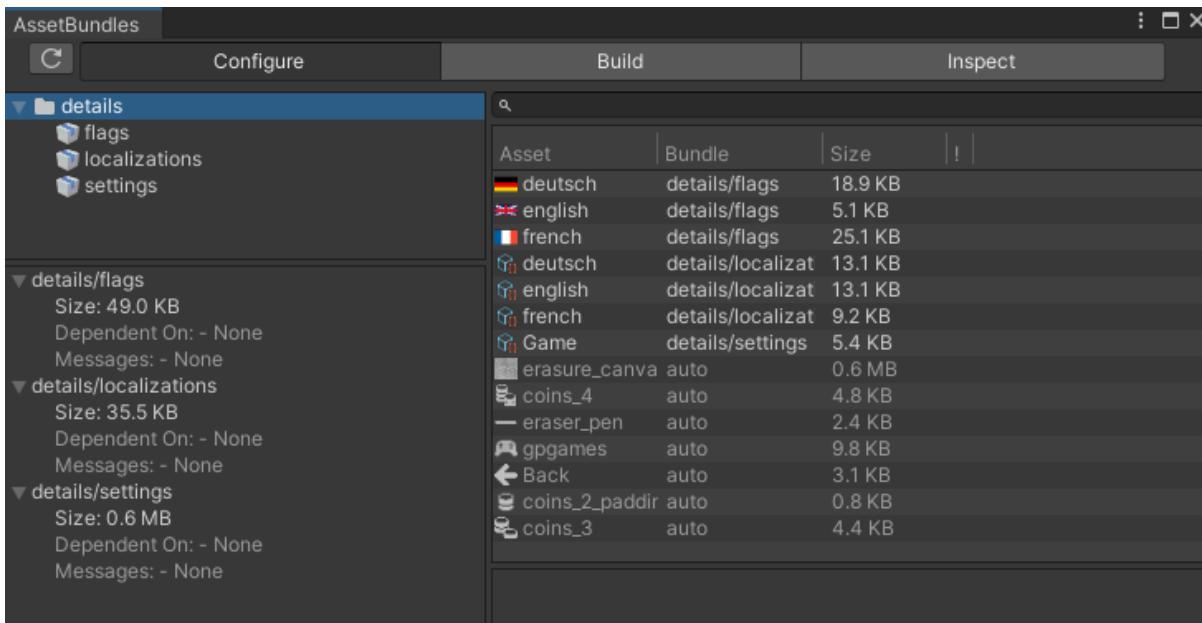
Do the same for the localizations files by selecting *details > localizations* accordingly.

In the *settings* folder, select only one *Game* file, since *Loading* is always supplied with the application and is needed for the initial load. Select file *Game* and assign *details > settings*

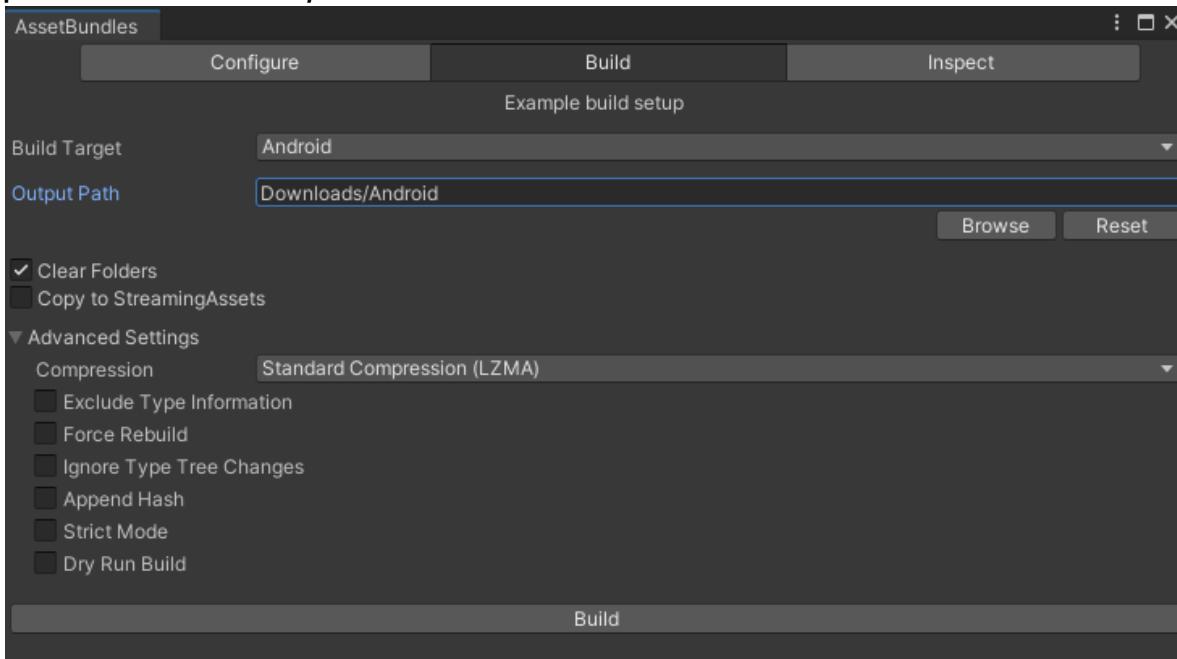
Now we are ready to create Asset bundles. These are binary files that the engine will be able to recognize after downloading from the server.

Open *Window > AssetBundle Browser*

On the *Configure* tab, make sure all files are in place



On the *Build* tab, select a platform. Each platform must have its own path in the *Output Path*.



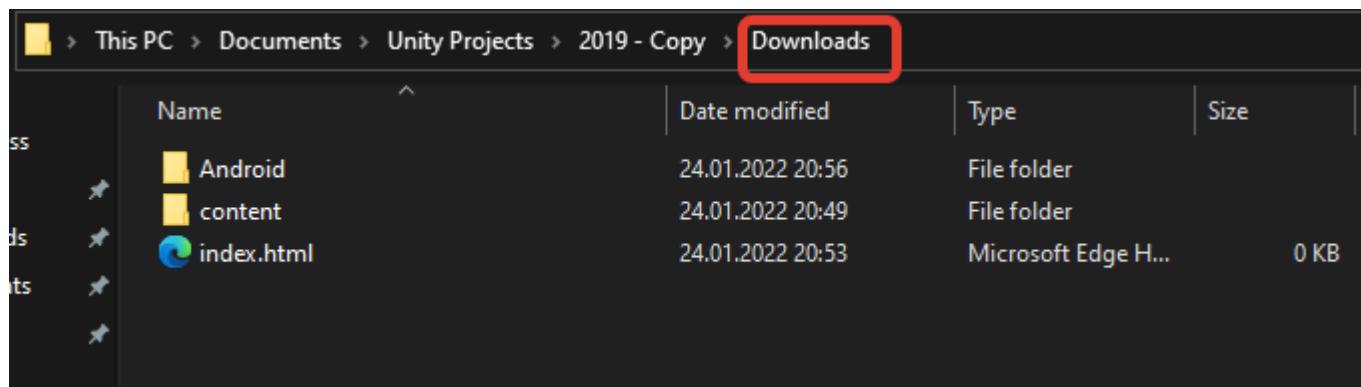
For Android *Downloads/Android* for iOS *Downloads/iOS*. Click build.

Open the root folder of your Unity project. There you will see a new Downloads folder. Copy the *Assets/PictureQuizPlus/Resources/content* folder into it, which

contains the files of your tasks. They will not be downloaded for the player all at once, but as needed.

Also create an empty file in the new Downloads folder with the name specified in *File to check host connection*.

In the end everything should look like this



## Upload to server

Now you can upload the Downloads folder to the server (or add it to the *github pages*(<https://pages.github.com/>) repository). The server must be configured so that the files from this folder are available for download using the following paths.

%Remote url%/Downloads/index.html

%Remote url%/Downloads/Android/details/localizations

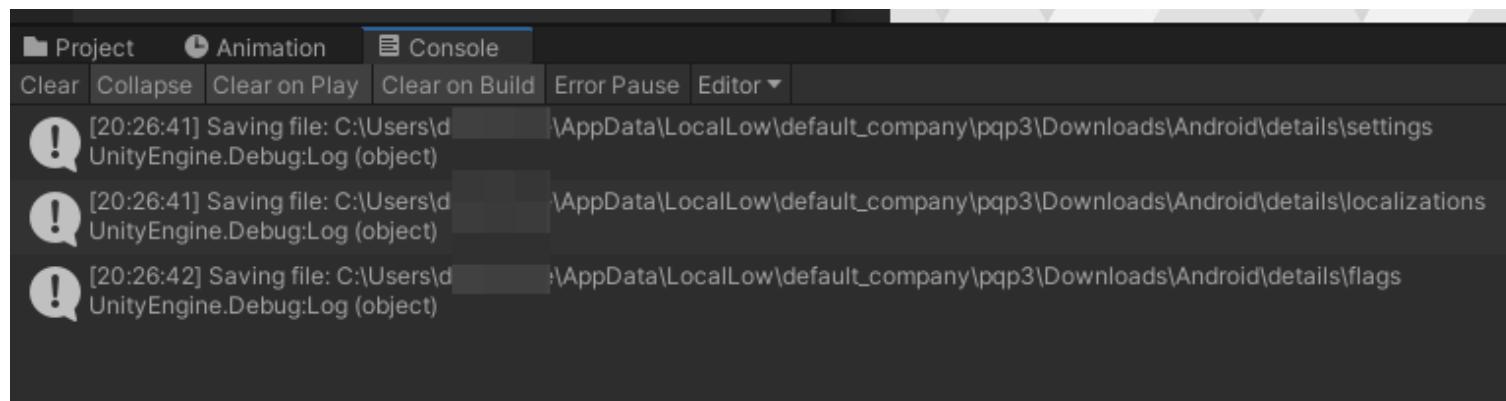
%Remote url%/Downloads/Android/details/settings

%Remote url%/Downloads/Android/details/flags

%Remote url%/Downloads/content/Abstract/Sport/1.png etc.

This is easy to do if you are using *apache* or *nginx* and have full disk space and routing permissions on the server. And super easy for Github Pages. Just create a public repository on *github.com* containing only this Downloads folder and set up *Github Pages* for this repository.

Now you can test it right in Unity. Watch console to know where files are saved



If you configured everything correctly, it will not show any errors when loading, otherwise look in the console for errors

Before building the application, do not forget to remove */PictureQuizPlus/Resources/content* folder from the project so that it does not get into the final bundle