VR SIMULATION OF AR NEWS

Support Documentation

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SUMMARY

● __FAQ__

How to change the SQL server logs ?

In Database.cs, you will have to modify the string "constr" line 37 with the new logs.

How to modify or add an SQL request ?

In *Database.cs*, you will find all the SQL queries listed by table. Each fonction start by calling the ConnectDB to open the connection. You will have to call the DisconnectDB at the end of your function.

You can test the validity of your query in the web control panel of the database (https://phpmyadmin.alwaysdata.com/), in the "SQL" tab.

Unity crash clicking the running button, how to fix it ?

If you experienced lags or unity crash clicking the running button, one of your SQL function may not call DisconnectDB at its end.

How to modify the time limit of view count ?

In *Database.cs*, change the value of the const " VIEW_DELAY_MIN " line 33.

How to modify news environment (white transparent fog) distance ?

See the "Size Of News Environnement" parameter in the News prefab.

How to modify the minimal distance of the preview ?

See the "Minimal Distant From Player" parameter in the News prefab.

How to modify the trigger floor area of the preview ?

See the "Preview Area Radius" parameter in the News prefab.

How to change the spawn coordinate constant ?

In *StaticClass.cs*, change both SPAWN_X and SPAWN_Z constants values with the new coordinates, line 36-37.

How to change the news panel initial position ?

See the "Panel Distance" and "Panel Height Down Offset" parameters in the News prefab.

How to change the green exit sphere initial position ?

See the "Green Sphere Distance" parameters in the News prefab.

How to change the comments position ?

The 4 comments positions (above, left, right, behind) in the user settings are set in *CommentGameObject.cs* script. They are set in a static function named SetCommentsPosition. You can change the *commentsPosition* value set in each case to change the initial position depending on which position the user has chosen.

How to change the comments offset ?

The comments offset is set in *CommentGameObject.cs*. Change the value of *commentOffset* variable to change the offset of the comments.

How to modify the old comment paper scroll background color?

See the OldCommentPaperScroll prefab.

How to modify speed opening and closing of the old comment scroll paper ?

See the OldCommentPaperScroll prefab.

How to change the steam VR binding ?

Make sure you have install SteamVR asset to your UnityEditor from the Unity assets store.

In your editor, go in *Window* (tab)→ *SteamVR Input*.
SteamVR Input window will appear. Here you have the Actions. Those Actions are use in script to get VR inputs.
To bind your VR inputs to the Actions, click on *Open binding UI*. This will open a web browser page. On this page, you can bind VR inputs of every VR joystick (HTC Vive, Oculus Rift…) to the Actions define in the SteamVR Input window.

- # **Resources**
  - ## **Database**

    Contains the architecture of the database in three formats (.csv, .xml, .sql).

  - ## **Prefabs**
    - ### **DevMode**
      - #### *CommentRow*

A horizontal group layout containing information about a comment for DevStats scene. One prefab is instantiated for one comments.
One row of a comment information in DevStats scene.

Player	News	Date	Content	
Player	News	Date	Content of the comment	☒

- #### *Row*

A horizontal group layout containing information about a "player last viewed on a news" for DevStats scene. One prefab is instantiated for one player for one news.
One row of a "last viewed" information in DevStats scene.

Player	News	Date of last view	Reaction	NB Cmts
Player	News	Date	Reaction	NB Cmts

- ### **News**
  - #### **Media**
    - ##### *Button*

Button where his size is responsive to his text content size. Text = media type (image, video, audio) with the numero of the media (ex : Image1, Audio2 …). Use in ButtonList prefab. Contains a plane game object as a child with *ClickableUIVR.cs* script to allow clicking on it with VR inputs.

- ##### *ButtonList*

A horizontal group layout list of Button. The ButtonList is filled and used in MediaContainer prefab.

○ *MediaContainer*

Manage MediaPlayer prefab and ButtonList prefab to display the chosen media. *MediaContainer.cs* script manage the buttons to switch between the different medias, the size of the media to fit in a 16:9 maximum ratio and manage the control bar behaviors (also enables it when the media is a video or audio and disables it when it is an image).
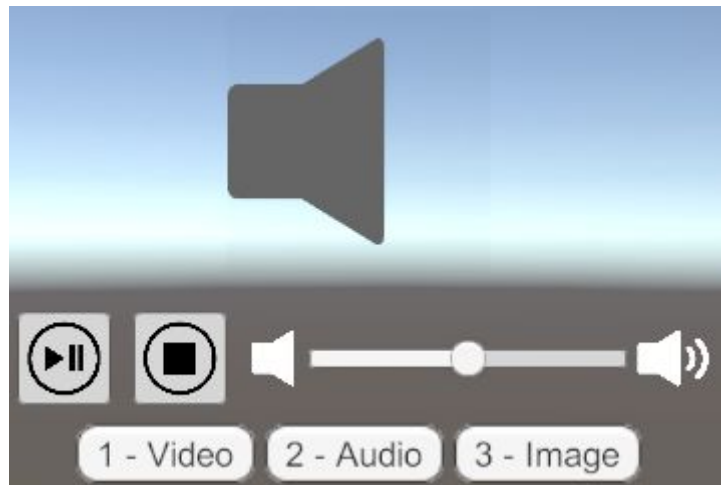
○ *MediaPlayer*

MediaPlayer prefab display the chosen media. Depending on the type, different game object are activate or deactivate (*Video, Audio, Image)* through *MediaContainer.cs* script. *MediaPlayer.cs* script attached to it manage the control bar, the display of the media (resize it if necessary) and manage the network, displaying them if there is any.

● *Comment*

The Comment prefab is a "comics bubble" representation of a comment. This prefab is instantiated when you enter in a news. According to user settings, 1 to 5 comments can be display. This prefab is also use when you create a new comment with the microphone inside a news.
CommentGameObject.cs script attached to it manage the comments positionning (depending on user settings), the content and author display, the speaker and manage the 3 buttons : *ValidateButton*, *RejectButton*, *DeleteComments*.
Attached to those 3 buttons, *VRTrigger* is a plane game object which allow the user to click on the button with a VR hand input. The bubble can be grap and move by the VR hands (*CommentGameObject.cs* inherited from *Grababble.cs*).

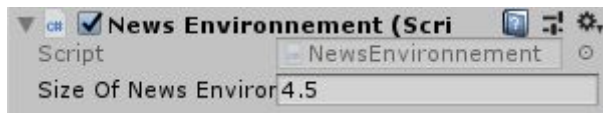## ● *News*

The News prefab contains :

- NewsEnvironnement : a fog around the news activated when you enter in the news.
- NewsSphere : a sphere use to enter or exit the news.
- InTheNews : contains all the game objects related to news information (content panel, comments, MediaContainer …).
- Beacon : a beacon to see from far away the news.

NewsEnrionnement : the *NewsEnrionnement.cs* script handle the creation of the fog around the news. You can change the distance of the fog with the parameter "Size Of News Environnement".

NewsSphere : *NewsSphere.cs* script allow the player to grab the sphere (inherited from *Grababble.cs*) and manage the enter and exit of the news when you put the sphere on your head. It also fill the title and the stats of the news (number of comments and number of views).

The sphere become green, smaller and his position is set to your feet when you enter in the news. Change "Green Sphere Distance" to put some distance from your feet to the sphere, when your enter in the news.

"Go Out When Walk Away" parameter get you out of the news as you move far away from the sphere.

InTheNews : contains all the game object which provides information about the news.

InTheNews is enabled only if you enter the news and is disabled when you exit.

Canvas_Story contains all the game objects relative to direct news information (content, title, tags …).

Comments is the parent game object where all the comments will be instantiate.

OldCommentPaperScroll list all the old comments depending on user settings (if there is not old comments, the paper scroll won't be enable).

Canvas_Story has [NewsPanel.cs](#) script attached to it. This script deals manage the positions of all the game objects in the news. It also loads the comments.

Change "Panel Distance" parameter to modify the distance of *Canvas_Story* from the player when you enter in the news.

Change "Panel Height Down Offset" parameter to modify the height of *Canvas_Story* when you enter in the news (set to *0,* the news panel content will be at the height of the player head, set to a *positive value* add a down offset, panel lower).

[PreviewAreaTrigger.cs](#) script is attached to the news prefab.
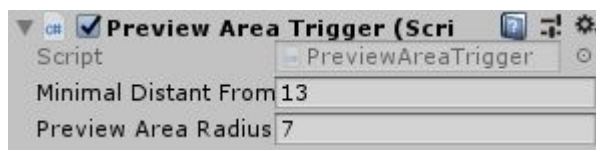
This script manage the activation of the [NewsPreview](#) game object.

The activation is triggered when the teleport pointer is closed to the news and you are enough far away from the news.

Change "Minimal Distant From Player" parameter to increase or decrease the minimal distance player/news to allow the activation of the news preview.

Change "Preview Area Radius" parameter to increase or decrease the maximal distance the teleport pointer have to be to allow the activation of the news preview.

● *OldCommentPaperScroll*

The OldCommentPaperScroll prefab is a game object displaying the old comments depending on how much comments the user want to be displayed in the news (user settings).
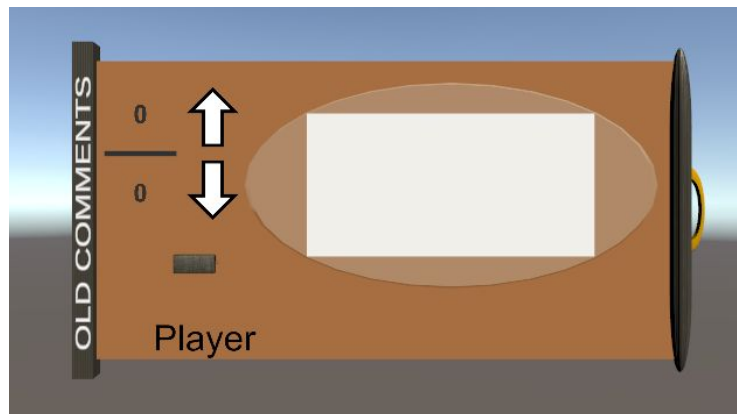

You can change the background color of the paper : child *ScrollPaper* → component *Image* → parameter *Color*.

You can also change the speed of opening or closing of the paper scroll : child *OpenScroll* → component *OldCommentLinearDrive* → parameter *Momentum Dampen Rate*

● *IndicationBeginning*

IndicationBeginning prefab is use in the TownSimulation scene. It is a panel which give tutorial information to the player. The "Understand" button destroy this panel.
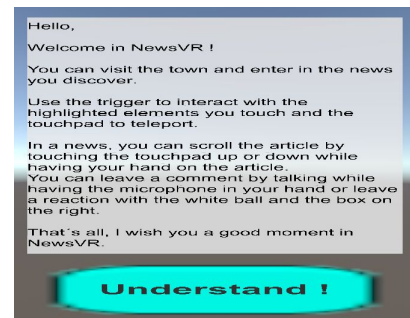
● *NewsPreview*

NewsPreview prefab has *NewsPreview.cs* script attached to it. This script fills in the

NewsPreview with the news information (the news reference is given by the script *PreviewAreaTrigger.cs*) and set his position and rotation (always facing the player head).
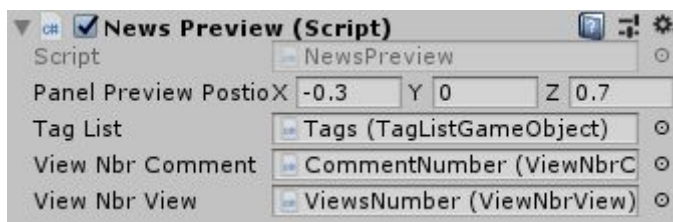
"Panel Preview Position" parameter define the position where the news preview will appear relative to the player head. Example : X = 0 ; Y = 0; Z = 1 → in front of the player head.

● *Tag*

Equivalent of a button shape but you can't click on it. His size is responsive to his text size. Text = tags (Ex : Music, Business). Use and fill in Tags prefab.
This represent one tag of the news and has a background color, automatically set depending on the user's tag color preference.

● *Tags*

A horizontal group layout list of Tag. Use in NewsPreview prefab and in News prefab. *TagListGameObject.cs* script is attached to it. This script fills the group layout with Tag and the tags information from the news (it get the news reference automatically from NewsPreview or News).
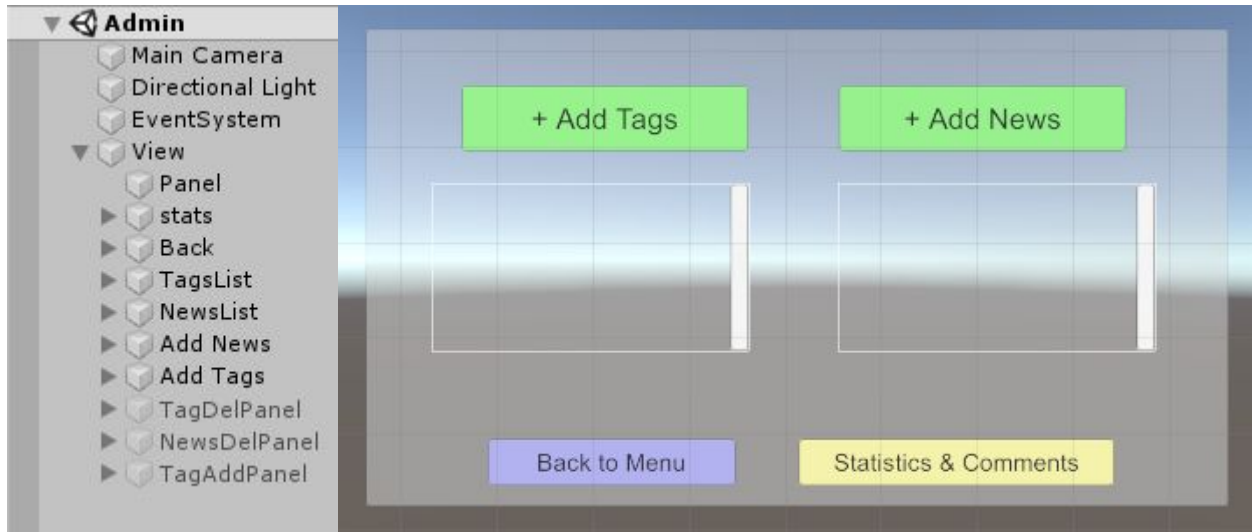
● **Scripts**

See the html documentation for scripts. You can find this documentation in the folder *script-doc* provided with this file by opening the *index.html* file.

● **Scenes**

○ *Admin*

script : *AdminPage.cs*

The three hidden panel are confirmation panels. There are activate when needed.

○ *DevStats*

script : *DevStats.cs*

Scene which provide news statistics and comments.

There is two type of information you can display : "Stats" and "Comments" (button in top of the scene). The button change the information that will be displayed :

- Stats : player name, news title, date of last view, reaction of the player, number of comment on this news of the player.
  Use Row prefab to display those information.
- Comments : player name, news title, date of the comment, content of the comment.
  Use CommentRow prefab to display those information.

○ *Login*

script : *Login.cs*

Accessible through the Menu scene (Log In button).

○ *Menu*

script : *MainMenu.cs*

Scene to start with / run first.

○ *Profile*

script : *Profile.cs*

Accessible through the Menu scene when a player is logged (Profile button).

○ *Register*

script : *Registration.cs*
Accessible through the Menu scene (Register button).

○ *TagMedia*

script : DevMode/*DevStatsNewsOption.cs*
Accessible through the news creation in the DevMode, once you filled the title and text of your news. Allow the player to add 4 tags and 4 media to a news.

○ *TownSimulation*

Main scene for the simulation. It is loaded, as a logged player, when you click the button "Enter Simulation" in the scene Menu.

IndicationBeginning : a panel which bring some information about the simulation to the player. Manage by *BeginInformation.cs* (attached to it).

EveryNews : an empty gameobject, parent of all the news game objects. The news game objects are instantiated by *NewsPlacement.cs* attached to *EveryNews* at the start of the scene.

Player : Player SteamVR prefab. Require to play in VR.

TeleportController : Has Teleport SteamVR prefab as child. TeleportController enable teleportation when you are out a news and disable it when you are in.

NewsPreview : Preview panel, summary of a news. (Prefab) Enabled when you point a news with the teleport pointer. By default disabled.