

## CATEGORIES:

### PLAYER CONTROLLER

- Added new animator for 2018 and 2019 due to unity has changed the way animator system works in these versions, making more difficult to use separated layers with the override option and allow the player to move properly with root motion. This was preventing the player from moving while strafing, for example, when aiming a weapon, since the strafe movements were configured in a different layer than the base. Now the strafe movement has been integrated in the base layer, allowing the player to move properly
- Added important improvement on the character controller of GKC related to ground adherence and stair movement (character walking on stairs with real colliders instead of just a slope surface). Now the movement is a lot better and smoother, works on first person as well, and also, by default, it doesn't need to attach stairs component to colliders to detect surfaces with steps or different height steps. The step height tests is below 0.1 and higher than 0.5, but even higher values should work properly as well
- Improved the upper body rotation system, used when the player is aiming and removed a few settings fields that are not necessary in that inspector anymore. This also reduces the number of spine vector fields to configure to just one, and this is now done automatically by the character creator
- Improved IK hand surface detection to place player hands on walls and other surface if he is close enough to them. Now movements are more adjusted to surface when player moves and responds better
- Improved and simplified ragdoll management to set the transition from ragdoll to mecanim and vice versa
- Added options on foot step manager to configure custom foot particles and foot prints in every footstep state, so every type of surface and terrain texture can use their own particles and foot prints, instead of same for all surfaces
- Added option to change fov and shake camera for sprint on third person. It allows to configure the shake state, so that shake state can be customized as needed

### PLAYER CAMERA

- Added buttons on the player camera inspector to instantiate locked cameras prefabs on the level and locked camera limits (to limitate vertical and horizontal position of the locked camera in views like top down, 2.5d, isometric, etc...). This will make easier to add new locked camera without need to search a prefab
- Added option on waypoint camera system (used for cutscenes) to use the bezier curves to make a smoother camera movement
- Added option to repeat camera shakes states x number of times, with option for a delay between shakes. This allows to configure shake states like big foot stomps

- Added events options for the external shake camera system, to configure events at the start and end of the camera shake, for things like play sounds from a distance to add even more weight or any other action to trigger

## LOCKED CAMERA

- Added buttons on player camera inspector to add new locked camera systems and locked camera limit systems to the level, to avoid the need to search for their prefabs in the folders of the project
- Improved transition for player movement between a previous and a new locked camera, setting the new camera direction after the player stops to moves, taking the movement direction reference once the player starts to move again
- Added a locked camera menu in the player camera to add pre configured locked cameras to the level. This allows to drop a locked camera prefab to the level with the settings already configured for a camera view like top down, isometric, 2.5d, tank controls, etc...with just one button, without need to search for a prefab

## WEAPONS

- Added dual weapon system, to allow the player to carry a separate weapon in each hand in any view, first, third, locked view, etc...similar to games like wolfenstein. The system has two ways to configure which weapon is carried in every hand, with the weapon wheel menu or the inventory weapon slots, by dragging and dropping two inventory weapons into the same weapon slot
- **IMPORTANT: Dual weapons are only supported if the weapons are managed by inventory, but not if they are only managed by the player weapons manager. This will be added in the next update, so if you want to use dual weapons, it is necessary to manage weapons through inventory (which is done by default)**
- Options on player weapon system to configure upper body shakes when the player fires a weapon and which can be configured separately for the single weapon upper body shake
- Added crouch and crouch recoil positions on weapons in first person along with an option to use or not these crouch positions on the current weapon. This allows that the weapon is changed to a lower position if the player crouches, including a crouch position recoil if the weapon is fired. Also, when the player gets up, the weapon returns to its regular walk position
- Added option on weapons to use a delay for projectiles to be placed in the position where they will impact in case the option to use raycast fire (place the projectile directly in the position where it would impact, instead of moving the projectile applying speed) is active, using also distance to check this delay, so the longer the distance, the higher this

delay can be. There is also an option to use always the same delay, no matter the distance to impact surface

- Added option to configure fake trail for projectiles which uses the option to be placed directly in the surface detected by raycast, which are those projectiles which don't travel through the level with rigidbody speed. So even if that type of firing is used, a trail can be placed to show where the bullet "is travelling". This can be configured separately in every weapon projectile, including also particles for smoke for example
- Player can now draw weapons with the key numbers to select a weapon. So if the player is not carrying a weapon and for example, he presses the number key 1 to select that weapon slot as current weapon and press 1 again, the player will draw that weapon. Same happens with slots with dual weapons configured on them
- Added options on weapons to configure if the player can run while carrying or aiming a weapon in third person. Also, another option allows to configure if a new movement speed is used while carrying the weapon, so the player can move slower, like the weapon is heavier than usual. These options were already available on weapons, but could be only configured for first person view
- Added action to press and hold draw weapon key to draw dual weapon, using the current weapon as right weapon and in case the player is not carrying dual weapons currently. The left weapon is the first single weapon found in the weapon slots
- Added option on attachment to show an info panel in every attachment with a text to explain the function of that attachment, just by hovering the mouse above the button of every attachment
- Added new option on weapons manager, similar to the general quick draw/option, but this can be configured separately in every weapon, so you can use the regular draw action in some and this one in others, usually for those weapons in positions hard to reach for the hands. Like that, the weapons appears directly in the hand configured as dominant and from there, is moved to the walk position. This also works for dual weapons
- Added options to configure if the player can jump while he is aiming a weapon in third person, if he can aim a weapon in the air in third person and if the aim mode is disabled if the player enters in air mode
- Added a new weapon (better said, a new tool), the gravity gun, allowing not only to grab and launch objects, but push them and attract objects as well using the secondary action of the weapon, using the attachment system to select the current secondary action to use
- Added option on weapons to configure a reload movement on first person, allowing to use a spline to configure a smooth movement of the weapon while it is being reloaded, with settings for reload duration and reload delays to being able to fire again. While the reload is in process, the player can't fire, and even if he is aiming, if the reload action is activated, the aim state is disabled
- Removed the free fire mode to move and shoot to sides or backward temporarily, but it will be reworked and included again in the future. Now, when the player fires a weapon

without aiming, he will look toward camera direction, like if the option that was available for this is always active, so weapons can be fired without aiming without problem

- Improved option to draw the next weapon available in case the current weapon is out of ammo, changing to the first weapon in the weapon slots after the current weapon which as ammo available
- Added option to draw dual weapons, selecting each weapon for every hand at the start of the game, similar to the option to start the game with one weapon, but with dual weapons instead

## INVENTORY

- Added a drop all units of an object button to the inventory and the check to just drop the object selected in case the units of that object in that slot is just one
- Added discard button to the inventory and a property in inventory objects, so if they can be discarded, this button will remove them from the inventory without dropping the object into the level, so the object no longer exists in any place. Of course this can be configured to only objects that can be used as pickups and similar, to avoid lost main quest objects

## VEHICLES

- Improved steer input on mobile devices on those vehicles which can steer to left and right
- Added option on vehicle weapon system to configure the weapons as enabled or disabled easily without need to remove the vehicle weapons system component

## MAP SYSTEM

- Added buttons on the map system inspector to instantiate the map creator prefab on the level. This will make easier to add the map creator system without need to search the prefab
- The compass can be used now without the need to use the map system or the mini map window. Along with this, there is left and right limits for icons which shows the objectives to reach in the compass, so they can be kept inside the compass space (instead of looking like moving below it)

## PICKUPS

- Added modification to allow to configure any type of prefab to be configured in the pickup manager (main manager of pickups) and dropped by the drop pickup system, so you can make a crate drop a car for example

## INTERACTION ELEMENTS

- In devices/objects to interact, there is an option to align the camera position to the player position before stop the interaction, so the position of the player will be the same as the camera. This can be combined with the option to make the player to look in a certain direction after stop using a device/object

## INPUT MANAGER

- Save/load input files info has been moved to game manager, so all the settings to configure path and file names are found in one single inspector
- Added an option to use separated buttons for touch movement of the player, instead of a touch joystick. This can be also used to just use movement keys to left and right in 2.5d mode. Also, it allows to change ingame from joystick to separated buttons and vice versa, for example, to drive a vehicle.

## OTHERS

- Added “About GKC” window editor to know info about the current version of GKC installed in the project and buttons to open the tutorial video list, open the forum and join discord
- Improved dialog, with positions to change the main line text of position according to if there is options to select, to give an answer to the current character

## ISSUES/BUGS FIXED

- Fixed issue related to first person control, when player entered in air mode, the speed was changed too fast from ground control to air control, reducing in the first instance to zero, instead of making a smooth transition
- Fixed bug on inventory, in the part of the weapon slots which were causing to not assign the proper weapon if a weapon slot was placed above other weapon slot to change the

selected weapon slot on a new slot (basically unequip the weapon in the other slot and change the number key assigned to the weapon whose slot has been changed)

- Fixed issue related to player not keep properly the weapon in third person, taking sometimes more time than usual to keep the weapon, with a slower speed of the hand with the IK system
- Fixed issue on the capture icon tool to make transparent captures of objects in the editor to use them for icons and similar stuff. Previously these captures were made not properly, with a kind of inverted colors
- Fixed issue on the option for the camera to use the mouse wheel to change between different camera states, which were not assigning properly the new state in certain situations
- Fixed stabilization issue on motorbike which was causing strange behavior when that vehicle is on a surface with a higher inclination of 10-15 degrees
- Fixed input not configured properly in the aircraft vehicle to rotate to left and right properly
- Fixes some issues on the save system which was causing an incorrect load of save slot, due to some incorrect index used for the save number, loading properly every game save slot

## ABILITIES SYSTEM

- The override possession system now allows to stop the override touch controls when the game is on a touch device or the touch control is active in the editor (previously, this button was disabled when the possession starts, since is the same used for activate devices/interaction)
- The climb ledge system has an option which allows to press the interaction button (E by default), when he is on the air to check if a surface is in front of the player. In that case, the player will grab to that surface and keep grabbed until press E again to lose that surface or press jump action to jump over it. It has also has an option to set a maximum number of grab surface until the player touches the ground again