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Part 2: Basic User Interface



Bottom of the Screen, Left to right:

- Chat & Dice:** Opens the chat and allows you to roll dice. This section is old and being reworked currently.
- Camera Height:** Useful to get an overview of the map. You can also use this with Shift + Mousewheel.
- Minis & Tokens:** Lets you place Miniatures and Tokens within the world.
- Measuring Tool:** While you can measure with your mini, these are tools to do static measurements.
- Initiative Tracker:** Helps you manage the flow of combat within a running game.

- Map Notes:** Map notes are attached to the map. You can use this to make notes for yourself as a GM.
- Attack Book:** These are similar to the map notes, but they get saved to your Game locally, and will show on any map.
- Spell Book:** These are similar to the map notes, but they get saved to your Game locally, and will show on any map.
- Web Browser:** While heavily under construction, the Browser is already useful for reference images or quick searches.

Upper Left of the Screen:

Building Mode on / off: When you click this button, you can only highlight / move minis until you click the button again.

- Tiles:** These can be used to modify the base Terrain. This button also has options for modifying the so called “mat”
- Objects:** These are the props you can build your world with. You can also use them to create terrain.
- Walls:** These are special objects that are made to snap together. Great to make castles or buildings!
- Effects:** These are persistent special effects. Since players see what’s in your hand, you can also mimic spells with them.

- Water Settings:** Underneath the so-called “mat”, there is an ocean which you can modify with this button.
- Time and Weather:** Modify the time of day, the weather, and the general lighting of your map.
- Map Pins:** These can be used to mark specific locations on your map. They are invisible to players and can hold texts.
- Cameras:** These are used to force your players to look at something in a specific way or angle.

Top of the Screen:

- Manage Players:** This is important in multiplayer games. It shows you who’s in your game and what status they have.
- Place Ping:** You can use this button to place a ping in the world. It’s very visible and players can click to go there with their camera.
- Grid Settings:** Show or Hide the map grid; This also lets you change the appearance of the grid.
- Snapping Settings:** Allows you to make objects and minis snap to the grid (grid snap) or on top of other objects (z-snap).
- Top Down Camera:** This is useful if you want to turn your map into a 2D-Map for exporting screenshots.

Upper Right of the Screen:

- Key Bindings:** Shows the Keyboard commands of GME. This is going to be reworked in the near future.
- Take Screenshot:** Takes a HD-Screenshot without the Interface and saves it to C:\GME Map Exports
- Graphics Settings:** Allows you to change the graphical performance of Game Master Engine to suit your system.
- Save / Load:** The name is rather self-explanatory, does what you would think it does.
- Exit:** Closes Game Master Engine completely.

Part 2.1: Tiles

Layer Manager:

Using this, you can create or remove layers. Be careful: Any layer you remove using the - symbol loses all its texture information. Layers are currently 10 feet apart. Layers are useful for making dungeons and roofs.

Instead of removing layers, you can also hide them. This only hides the layers though, not the objects on it. Use this instead of deleting layers, if you want to keep their textures for later. We're planning to add the ability to link objects to layers in the future, so you can hide both at the same time.

Paint / Remove / Add Tiles:

- Brush:** This lets you color tiles with the textures below.
- Pipette:** Lets you grab the texture of another tile, so you don't have to search for it again.
- Eraser:** This will remove tiles, basically making holes in your layer. This is useful for layers that should not cover all the map.
- Add Tiles:** This lets you add back tiles that you removed before.

Tile Brush Size:

Self-Explanatory, changes the size of your brush (which you see in the bottom middle of the picture)

Paint / Hide the Mat:

- Paint:** Pick a texture, then click this button to make all the mat (the blue ground outside of your layers) have that texture instead.
- Hide:** This is useful for making flying islands or space scenarios, basically anything where you don't want a "ground" to be seen.

Select Textures:

There's a multitude of textures to select from.



Part 2.2: Objects (a.k.a. Props)

Category Selection:

The category selection gives the possibility to choose between the superordinate categories Fantasy and Sci Fi, as well as subcategories, which specify exactly what kind of props should be displayed.

Prop Selection:

Overview of available objects, these can be selected by right-clicking and then placed in the world, the objects displayed depend on the selected categories.

Prop Editor / Gizmo Bar:

As the name suggests, the prop editor is used to edit placed and held props, which only need to be right-clicked if they are already placed. The available options are then, in the exact order, the adjustment of the position via the coordinates, the adjustment of the size of the object and the rotation of the object and last but not least the deletion of the object.

The Gizmo is intended to replace the Prop Editor and offers the same functions but in a more handy way. The functions are the same as in the editor, plus a few additional ones, and these are available via a left click on the desired object, thereby two things happen, firstly a bar opens at the top left and secondly 3 arrows are displayed starting from the object, which can be used for manipulation. The additional functions can be found in the following order in the bar after the number fields: The selection whether the change is oriented to the world or the object, whether the change starts from the pivot or the center of the selection and lastly how z-snapping should work for the object. This is a bit technical, and we will go over this in a future tutorial.

Prop Manager:

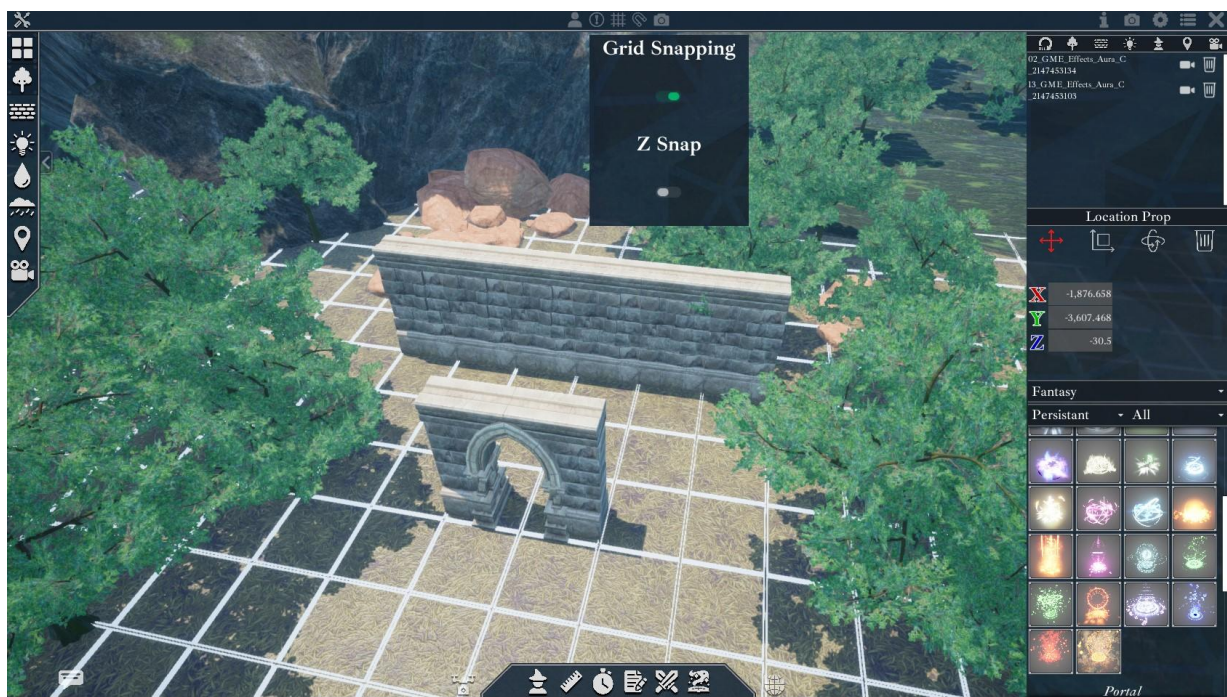
Provides an overview of all placed objects via a list with their names and various possibilities to interact with them. By simply clicking it is possible to open the gizmo for this object, the camera symbol takes you to the object and the trash can deletes the object.

Don't highlight objects:

The Don't highlight objects option is used to prevent interaction with objects other than placement, which is useful when using the engine to play games, take screenshots or view the map, among other things.



Part 2.3: Walls



Placing Walls:

Walls are placed just like any other object. However, it might make sense to turn on grid snapping in the top of the screen to get walls perfectly aligned. Currently, Z-Snapping does not work in conjunction with Grid Snapping.

Rotating Walls:

When rotating a wall with Q and E on the keyboard, it will rotate in 90° increments automatically. If you don't want that, hold shift while pressing Q or E, then the wall will turn in smaller increments.

Drawing straight Walls:

Walls can also be drawn by placing a wall object first, then holding shift, and then placing another wall tile in the distance. Currently, this only works for lines along the grid, but we might introduce dynamic wall drawing in the future.

Part 2.4: Effects

Showing Effects

Effects, like all other objects, also show up to the players if you merely have them in your hand. Therefore, you can use effects to mimic spells and other abilities by just dragging them along without placing them. Then, just right-click to get rid of the effect again.

Placing Effects

You can also place effects as permanent objects by simply putting them into the world just like any other object.

Moving Effects

Due to the nature of their models, effects can be hard to grab and move. Therefore, it might be easier to select an effect from the prop manager. You can filter for different types of objects in the prop manager using the buttons in the top.



Part 2.5: Ocean Settings



Here, the Ocean is just above the mat, which has a water texture.



Here, the Mat is the water, and the Ocean is the sky!

Showing the Ocean:

As standard, the ocean is below the mat. To show it at all, you need to push the height slider up slightly, so it raises above the mat. It can also be a good idea to hide the mat completely.

Ocean Settings:

Wave Speed: How fast the waves are moving up and down.

Amplitude: How high the waves are moving up and down

Opacity: How transparent the ocean is.

Light reflection: How much “luster” the ocean will show.

Change water color: You can pick one of five colors for now. We plan to replace this with a color picker soon.

Part 2.6: Time & Weather (a.k.a. Atmosphere)

Sun / Moon Settings (Time of Day)

Time of Day: The time of day. This is the main setting for setting the brightness/darkness of your map.

Sun/Moon Inclination: The precession of sun and moon. This effectively changes their position in the sky.

Sun Radius: Look for the moon and play with this. Also affects the brightness of the map at day time.

Moon Radius: Look for the moon and play with this. Also affects the brightness of the map at night time.

Moon Phase: The phase of the moon. Looks cool, and also affects the brightness of the map at night time.

Brightness: The overall brightness of the sky also affects the world directly. If high, even the night will be bright.

Saturation: The color saturation of the sky. Low Saturation makes the sky look gray.

Contrast: The contrast of the sky. High contrast makes the dark parts darker and the light parts lighter. Relatively subtle.

Weather Settings

Weather Preset: A list of weather types to choose from. Some of them can be rather extreme!

Cloud Speed / Wind Direction: This is visible if you look at the clouds moving.



Part 2.7: Map Pins



Placing Pins:

You can place pins from the left hand menu. You might want to scale them while placing them with CTRL-Mousewheel. Pins are Invisible to players.

Editing Pins:

You can right-click a pin to open it. It can hold both specific notes and links to other maps (click on “linked maps” to see that). In the bottom you can add maps to that list.

Also, you can click the cogwheel in the top to change a pins color and shape. Lastly, with the pin-shaped button, you can jump to a pin directly.

Part 2.8: Cameras

Spawning Cameras:

Cameras can be spawned from the left hand menu. They can be moved like minis (no gizmo right now)

Camera Menu:

By right clicking a camera, you open its menu.

Set as Map Spawn Point:

If activated, all players that log in to your game start at this camera's position. Only one camera can have this.

Force Perspective at spawn:

If activated, all players look in the direction the camera is facing when logging in.

Root all players here:

By clicking this, you force all players to look through that camera. They can still turn around freely, but they can't move. Only one camera can have this. We are planning to introduce selective cameras in the future.

Return players to Main Camera:

Unbinds the players from the camera and brings them back to the position they were before.



Part 3.1: Minis & Initiative



Spawning Minis:

You can spawn a mini from the leftmost button in the bottom middle of the screen (looks like a person with a hat). There are many minis to choose from - just go through the categories on the right, as with any other object to spawn. To open the Menu (or “Mini HUD”) for a mini, just right-click it.

Tokens

Tokens are a special kind of Mini. They are 2-Dimensional. When using the Mini-HUD (see below) by right clicking them, they have a special option “upload” on the top of the HUD menu. Here, you can enter any web address that hosts an image, and that image will display on the token.

Moving Minis:

Simply drag and drop a mini to move it - the program automatically tells you how far you would move. Sometimes, there's a bug when the mini is already selected. If it doesn't move, unselect it and then drag and drop it again.

Mini HUD, left side from top to bottom:

- Paint Mini:** Lets you color a mini and its baseplate.
- Scale Mini:** Lets you scale a mini as 1x1, 2x2, 3x3 or 4x4.
- Torch:** In the bottom, there's a little button to turn on and off. Select the slider to set the reach.
- Player Settings:** Sets which player can control the mini
- Hide Mini:** Makes the mini invisible to all players.
- Close Menu:** Closes the Mini HUD.

Mini HUD, right side from top to bottom:

- Hit points:** Lets you set hit points and temporary hit points for a mini.
- Set Mini Name:** Gives the mini a name. Minis need names to show up in the turn order.
- Measure (from mini):** Lets you measure from the mini without moving it.
- Status effects:** Lets you choose from several status effect symbols, which show on the nameplate.
- Other Options:** For now, only lets you turn on and off the nameplate.

Initiative Tracker:

You can open the initiative tracker with the stopwatch symbol at the bottom of the screen. Once open, you can click the little cogwheel to the left of the initiative display to add minis to the initiative.

A mini must be named to show up in the initiative tracker. You can also use the up and down buttons to sort the initiative after creating it.

Once you are done with your initiative order, click the cogwheel again and enjoy your fight!

Part 3.2: Measurement Tools

Spawning Measurement Tools

Measurement Tools are rulers and other shapes you can place in the world.
You place them first, then you drag their edges to the size you want to measure.

Types of Measurement Tools:

- Ruler:** Measures a distance from point A to point B in feet.
- Circle:** Measures a radial distance of a circle.
- Sphere:** Measures a radial distance of a sphere.

Deleting Measurement Tools:

If you right click a ruler or any other measurement tool, a button with a trash can shows up, which you can click to delete the tool.



Part 3.3: Open Map Notes, Attack Book and Spell Book

Differences between the three:

The **Map Notes** are saved inside the map itself. They can be used for GM notes or other map specific notes. They also get transferred if you give your map to someone else to open.

The **Spell Book** and **Attack Book** are saved inside your game. You would take them with you across all games and maps.
The Spell Book and Attack Book are conceptually identical. They are just separated for the user's convenience.

Additionally, Spell Books and Attack Books are pre-formatted for the user's convenience, while map notes are not.

Difference Between these and Map Pins:

In contrast to Pins, map notes and books can be formatted using a simple formatting language. We plan to introduce a “Show to players” feature for all of them though eventually.

Adding Notes:

Just hit the blue + in the bottom left of the note window to create a new note

Editing Notes:

To edit notes, you need to press the button in the top right. When you're done, hit that button again and the note will be saved.

Renaming Notes:

You can click on a notes name in the list to the left to rename it.

Deleting Notes

In order to delete notes, you also need to press the edit button, and a little trash can will show up in the bottom right corner of the note.



Part 3.4: Chat and Dice

Opening the Chat

The chat can be found on the bottom left corner of the screen. It is separated into three sections, plus the dice section.

General Chat: This is where the players can talk between themselves.

Roleplay Chat: This is meant to be an in-character only chat. However obviously you can use these chats however you want.

Dice Rolls: This chat displays the dice that have been rolled.

Rolling Dice

To the very left of the screen, you see multiple dice. You can click them to roll one of that type of die.

You can instead also enter a number and then click the die to roll that many dice of that type.

The chat and dice sections are currently being reworked; they will probably be quite a bit slicker in the next version to come :)



Part 4.1: Other Functions

Importing Map Files

Maps go into:

C:\Users\your-user-name\AppData\Local\GameMasterEngine\Saved\SaveGames

Each map is a folder with 2 files in it, and that folder has to be directly inside the SaveGames Folder.

If the folder was zipped before, it needs to be unzipped.

Getting Help

The easiest way to get help for Game Master Engine is to join our discord server. There you can ask anything, see maps made by others, get help, report bugs and make suggestions for the further development of Game Master Engine. The Discord Server can be found here: <https://discord.gg/T9D5f8VTmu>

