



## Emoji System Base

Documentation

---

**Creator:** Lucas Gomes Cecchini

**Online Name:** AGAMENOM

## Overview

The **Emoji System Base** is an emoji library for **Unity**.

With it you can add a whole list of emojis to your games as well as a tool to make editing **SpriteAsset** and **TMP\_SpriteAsset** easier.

# Emoji to Unicode Converter

<https://lingojam.com/EmojitoUnicodeConverter>

Emoji	Unicode								
😊	1f600	😁	1f603	😄	1f604	😆	1f601	😆	1f606
😅	1f605	😂	1f602	🤣	1f923	😊	263a	😊	1f60a
😎	1f607	😎	1f642	🤔	1f643	😊	1f609	😊	1f60c
😍	1f60d	😍	1f970	😘	1f618	😊	1f617	😊	1f619
🥰	1f61a	🥰	1f60b	😘	1f61b	😘	1f61d	😘	1f61c
😜	1f92a	😜	1f928	😜	1f9d0	😉	1f913	😉	1f60e
😱	1f929	😱	1f973	😯	1f60f	😯	1f612	😯	1f61e
😢	1f614	😢	1f61f	😢	1f615	😢	1f641	😢	2639
😡	1f623	😡	1f616	😡	1f62b	😡	1f629	😡	1f97a
😭	1f622	😭	1f62d	😭	1f925	😊	1f636	😭	1f624
😡	1f620	😡	1f621	😡	1f92c	😠	1f92f	😡	1f633
🤬	1f975	🤬	1f976	🤬	1f631	🤬	1f628	🤬	1f630
😢	1f625	😢	1f613	😊	1f917	😢	1f914	😊	1f92d
😐	1f92b	😐	1f610	😑	1f611	😐	1f62c	😐	1f644
😯	1f62f	😯	1f626	😯	1f627	😯	1f62e	😯	1f632
😴	1f634	😴	1f924	😴	1f62a	😴	1f635	😴	1f910
😖	1f974	😖	1f922	😖	1f92e	😖	1f927	😖	1f637
😢	1f912	😢	1f915	😢	1f911	🐵	1f920	devil	1f608
👿	1f47f	👿	1f479	👿	1f47a	👿	1f921	💩	1f4a9
💀	1f47b	💀	1f480	💀	2620	👽	1f47d	👾	1f47e
🤖	1f916	🎃	1F383	😺	1f63a	😺	1f638	涙	1f639
😺	1f63b	😺	1f63c	😺	1f63d	😺	1f640	😺	1f63f
😸	1f63e	😸	1f44b	😸	1f91a	😸	1f590	😸	270b
👉	1f596	👉	1f44c	👉	270c	👉	1f91e	👉	1f91f
👉	1f918	👉	1f919	👉	1F448	👉	1F449	👉	1F446
👉	1F595	👉	1F447	👉	261D	👉	1F44D	👎	1F44E
👉	270A	👉	1F44A	👉	1F91B	👉	1F91C	👉	1F44F
👉	1F64C	👉	1F450	👉	1F932	👉	1F91D	👉	1F64F
👉	270D	👉	1F485	👉	1F933	👉	1F4AA	👉	1F9B5
👉	1F9B6	👉	1F463	👉	1F442	👉	1F443	👉	1F9E0
🦷	1F9B7	🦷	1F9B4	👀	1F440	👁	1F441	👅	1F445
👄	1F444	👄	1F48B	👄	1F476	👄	1F467	👄	1F9D2
👤	1F466	👤	1F469	👤	1F9D1	👤	1F468	👤	1F9D4
🧐	1F475	🧐	1F9D3	🧐	1F474	🧐	1F472	🧐	1F9D5
🧦	1F9F3	🧦	1F302	🧦	2602	🧦	1F9F5	🧦	1F9F6
👙	1F453	👙	1F576	👙	1F97D	👙	1F97C	👙	1F454
👕	1F455	👕	1F456	👕	1F9E3	🧤	1F9E4	🧥	1F9E5
👗	1F9E6	👗	1F457	👗	1F458	👗	1F459	👚	1F45A
🍎	1F45B	🍎	1F45C	🍎	1F45D	🍎	1F392	👞	1F45E

靴子	1F45F	靴子	1F97E	靴子	1F97F	高跟鞋	1F460	靴子	1F461
雨靴	1F462	王冠	1F451	雨伞	1F452	礼帽	1F3A9	学士帽	1F393
水桶	1F9E2	军帽	26D1	冰激凌	1F484	戒指	1F48D	公文包	1F4BC
狗	1F436	猫	1F431	老鼠	1F42D	仓鼠	1F439	兔子	1F430
狐狸	1F98A	熊	1F43B	熊猫	1F43C	老虎	1F43B	雪花	2744
浣熊	1F428	老虎	1F42F	狮子	1F981	猴子	1F42E	猪	1F437
心脏	1F43D	青蛙	1F438	猴子	1F435	猩猩	1F648	猴子	1F649
猴子	1F64A	猴子	1F412	鸡	1F414	火鸡	1F427	鸟	1F426
鸟	1F424	蛋	1F423	鸡	1F425	火烈鸟	1F986	鹰	1F985
猫头鹰	1F989	蜥蜴	1F987	狐狸	1F43A	狗	1F417	马	1F434
独角兽	1F984	蝴蝶	1F41D	毛毛虫	1F41B	蝴蝶	1F98B	老鼠	1F40C
虫子	1F41E	狮子	1F41C	花	1F99F	蜥蜴	1F997	蜘蛛	1F577
蜜蜂	1F578	青蛙	1F982	恐龙	1F422	蛇	1F40D	蛇	1F98E
海龟	1F996	熊	1F995	章鱼	1F419	海螺	1F991	鱼	1F990
珊瑚	1F99E	螃蟹	1F980	鱼	1F421	小丑鱼	1F420	鱼	1F41F
海豚	1F42C	海豚	1F433	海豚	1F40B	海豚	1F988	海龟	1F40A
狮子	1F405	狮子	1F406	大象	1F993	大象	1F98D	象	1F418
象	1F99B	象	1F98F	骆驼	1F42A	狗	1F42B	牛	1F992
鹿	1F998	熊	1F403	熊	1F402	狗	1F404	狗	1F40E
猪	1F416	羊	1F40F	羊	1F411	狗	1F999	狗	1F410
狗	1F98C	狗	1F415	狗	1F429	狗	1F408	鸡	1F413
鸡	1F983	树	1F99A	鹦鹉	1F99C	鸭子	1F9A2	鸽子	1F54A
兔子	1F407	熊猫	1F99D	兔子	1F9A1	兔	1F401	鼠	1F400
松鼠	1F43F	松鼠	1F994	松果	1F43E	松鼠	1F409	松鼠	1F432
蔬菜	1F335	树	1F384	树	1F332	树	1F333	椰子树	1F334
植物	1F331	叶	1F33F	叶	2618	四叶草	1F340	盆栽	1F38D
植物	1F38B	叶	1F343	叶	1F342	枫叶	1F341	蘑菇	1F344
植物	1F41A	玉米	1F33E	花	1F490	花	1F337	花	1F339
植物	1F940	花	1F33A	花	1F338	花	1F33C	向日葵	1F33B
太阳	1F31E	笑脸	1F31D	月亮	1F31B	月亮	1F31C	月亮	1F31A
月亮	1F315	月亮	1F316	月亮	1F317	月亮	1F318	月亮	1F311
月亮	1F312	月亮	1F313	月亮	1F314	月亮	1F319	地球	1F30E
地球	1F30D	地球	1F30F	闪电	1F4AB	星星	2B50	星星	1F31F
闪电	2728	闪电	26A1	闪电	2604	爆炸	1F4A5	火焰	1F525
彩虹	1F32A	彩虹	1F308	太阳	2600	爆炸	1F324	闪电	26C5
云	1F325	云	2601	雨滴	1F326	雨滴	1F327	雨滴	26C8
闪电	1F329	云	1F328	雨滴	1F300	雪人	2603	雪人	26C4
风	1F32C	风	1F4A8	水滴	1F4A7	水滴	1F4A6	雨伞	2614
水果	26F1	水果	1F30A	水波	1F32B	苹果	1F34F	苹果	1F34E
水果	1F350	水果	1F34A	柠檬	1F34B	香蕉	1F34C	西瓜	1F349
水果	1F347	草莓	1F353	梨	1F348	樱桃	1F352	桃子	1F351
水果	1F96D	菠萝	1F34D	椰子	1F965	鳄梨	1F95D	西红柿	1F345
水果	1F346	鳄梨	1F951	西兰花	1F966	西兰花	1F96C	黄瓜	1F952
水果	1F336	芒果	1F33D	胡萝卜	1F955	土豆	1F954	玉米	1F360
水果	1F950	芒果	1F96F	面包	1F35E	面包	1F956	曲奇饼	1F968
水果	1F9C0	蛋	1F95A	放大镜	1F373	汉堡	1F95E	薯条	1F953

🥩	1F969	🍗	1F357	🍗	1F356	🍔	1F9C6	🥪	1F32D
🍔	1F354	🍟	1F35F	🍕	1F355	🥪	1F96A	🌯	1F959
🌮	1F32E	🌯	1F32F	🥗	1F957	🌯	1F958	🥤	1F96B
🍜	1F35D	🍜	1F35C	🍜	1F372	🍜	1F35B	🍣	1F363
🗾	1F371	🥧	1F95F	🥟	1F364	🥠	1F359	🇷.epam	1F35A
HomeAs	1F358	🍥	1F365	🥟	1F960	🍪	1F96E	🔪	1F362
🍦	1F361	🍧	1F367	🍧	1F368	🍦	1F366	🍰	1F967
🧁	1F9C1	🧁	1F370	🧁	1F382	🎩	1F36E	🔍	1F36D
-pane	1F36C	🥤	1F36B	^K	1F37F	🍩	1F369	🍪	1F36A
🥚	1F330	🍳	1F95C	🍯	1F36F	🥛	1F95B	🍼	1F37C
☕	2615	🍵	1F375	🥤	1F964	🥃	1F376	🍺	1F37A
🍺	1F37B	🍻	1F942	🍷	1F377	🥃	1F943	🍸	1F378
🏓	1F379	🎱	1F37E	🥄	1F944	🍴	1F374	🍴	1F37D
🍜	1F963	🥤	1F961	-pencil	1F962	🧂	1F9C2	⚽	26BD
🏀	1F3C0	🏈	1F3C8	⚾	26BE	⚾	1F94E	🏓	1F3BE
🏐	1F3D0	🏉	1F3C9	蹴鞠	1F94F	🎱	1F3B1	🏓	1F3D3
🔍	1F3F8	✍	1F3D2	🗡	1F3D1	_MICROPHONE	1F94D	筢	1F3CF
🎮	1F945	🚩	26F3	🎯	1F3F9	🎧	1F3A3	🥊	1F94A
👕	1F94B	🎮	1F3BD	🛹	1F6F9	💻	1F6F7	⛸	26F8
🎿	1F94C	🎿	1F3BF	🏂	26F7	🏎	1F3C2	🏆	1F3C6
🏅	1F947	🏅	1F948	🏅	1F949	🏅	1F3C5	🏅	1F396
🎪	1F3F5	🎗	1F397	🎗	1F3AB	🎟	1F39F	🎪	1F3AA
🎭	1F939	🎭	1F3AD	🎭	1F3A8	🎬	1F3AC	🎤	1F3A4
🎧	1F3A7	🎧	1F3BC	🎹	1F3B9	⌚	1F941	⛏	1F3B7
🎸	1F3BA	🎸	1F3B8	🎸	1F3BB	🎲	1F3B2	♟	265F
🎯	1F3AF	🎯	1F3B3	🎮	1F3AE	🎰	1F3B0	✖	1F9E9
🚗	1F697	🚗	1F695	🚗	1F699	🚐	1F68C	🚋	1F68E
🚚	1F3CE	🚚	1F693	🚑	1F691	🚌	1F692	🚐	1F690
🚛	1F69A	🚛	1F69B	🚜	1F69C	🛴	1F6F4	🛵	1F6B2
🏍	1F6F5	🏍	1F3CD	🚨	1F6A8	🚔	1F694	🚍	1F68D
🚕	1F698	🚕	1F696	⛽	1F6A1	🚖	1F6A0	🚖	1F69F
🚉	1F683	🚉	1F68B	🚉	1F69E	🚆	1F69D	🚄	1F684
🚂	1F685	🚂	1F688	🚂	1F682	🚇	1F686	🚉	1F687
🚉	1F68A	🚉	1F689	✈️	2708	💨	1F6EB	🚉	1F6EC
🛩	1F6E9	🛩	1F4BA	🛩	1F6F0	🚀	1F680	🛸	1F6F8
🌋	1F681	🌋	1F6F6	🌋	26F5	🌋	1F6A4	🌋	1F6E5
🚢	1F6F3	🚢	26F4	🚢	1F6A2	⚓	2693	⛽	26FD
🚧	1F6A7	🚧	1F6A6	🚧	1F6A5	🗼	1F68F	🗺	1F5FA
🗿	1F5FF	🗿	1F5FD	🌋	1F5FC	🏡	1F3F0	��	1F3EF
🏭	1F3DF	🏭	1F3A1	🏭	1F3A2	⚡	1F3A0	🏡	26F2
🏜	1F3D6	🏜	1F3DD	🏜	1F3DC	🌋	1F30B	🏔	26F0
🌋	1F3D4	🌋	1F5FB	🌋	1F3D5	🏡	26FA	🏡	1F3E0
🏡	1F3E1	🏡	1F3D8	🏡	1F3DA	🏗	1F3D7	🏗	1F3ED
🏢	1F3E2	🏢	1F3EC	🏢	1F3E3	🏗	1F3E4	🏢	1F3E5
🏬	1F3E6	🏬	1F3E8	🏬	1F3EA	🏡	1F3EB	🏬	1F3E9
🏡	1F492	🏛	1F3DB	🏡	26EA	🏡	1F54C	🏛	1F54D

🕋	1F54B	⛩	26E9	🏔	1F6E4	˓	1F6E3	˓	1F5FE
↳	1F391	🏡	1F3DE	˓	1F305	˓	1F304	笔	1F320
❄️	1F387	烟花爆	1F386	˓	1F307	˓	1F306	楼宇	1F3D9
🛍️	1F303	⌚	1F30C	˓	1F309	˓	1F301	⌚	231A
📱	1F4F1	📱	1F4F2	💻	1F4BB	💻	2328	💻	1F5A5
🖨️	1F5A8	🖱️	1F5B1	🖱️	1F5B2	🖱️	1F579	🖨️	1F5DC
⌚	1F4BD	💾	1F4BE	💿	1F4BF	💿	1F4FC	📷	1F4F7
📸	1F4F8	📠	1F4F9	🎥	1F3A5	🎥	1F4FD	🎞️	1F39E
📞	1F4DE	📞	260E	📟	1F4DF	📟	1F4E0	📺	1F4FA
📻	1F4FB	🎙️	1F399	📅	1F39A	📅	1F39B	🧭	1F9ED
⌚	23F1	⌚	23F2	⌚	23F0	⌚	1F570	⌚	231B
⏳	23F3	💡	1F4E1	🔋	1F50B	💡	1F50C	💡	1F4A1
🔦	1F526	🕯️	1F56F	🧟	1F9EF	🧟	1F6E2	🧟	1F6CD
💸	1F4B8	💵	1F4B5	💵	1F4B4	💵	1F4B6	💵	1F4B7
💰	1F4B0	💳	1F4B3	💎	1F48E	⚖️	2696	💼	1F9F0
🔧	1F527	🔨	1F528	🛠️	2692	🛠️	1F6E0	🔨	26CF
⚙️	1F529	⚙️	2699	📦	1F9F1	📦	26D3	🧲	1F9F2
🔫	1F52B	💣	1F4A3	💣	1F9E8	🔫	1F52A	🔫	1F5E1
⚔️	2694	🛡️	1F6E1	🛡️	1F6AC	🛡️	26B0	🛡️	26B1
🪖	1F3FA	👤	1F52E	👤	1F4FF	👤	1F9FF	💈	1F488
👉	2697	👉	1F52D	👉	1F52C	👉	1F573	👉	1F48A
💉	1F489	💉	1F9EC	💉	1F9A0	💉	1F9EB	💉	1F9EA
🌡️	1F321	🌡️	1F9F9	🌡️	1F9FA	🌡️	1F9FB	🌡️	1F6BD
🚰	1F6B0	🚰	1F6BF	🚰	1F6C1	🚰	1F6C0	🚰	1F9FC
💊	1F9FD	💊	1F9F4	💊	1F6CE	💊	1F511	💊	1F5DD
🚪	1F6AA	🚪	1F6CB	🚪	1F6CF	🚪	1F6CC	🐻	1F9F8
🖼️	1F5BC	🖼️	0BA3	🛍️	1F6D2	🎁	1F381	🎈	1F388
🎏	1F38F	🎏	1F380	🎏	1F38A	🎏	1F389	👟	1F38E
🏮	1F3EE	🏮	1F390	🏮	1F9E7	✉️	2709	✉️	1F4E9
✉️	1F4E8	✉️	1F4E7	✉️	1F48C	✉️	1F4E5	✉️	1F4E4
📦	1F4E6	📦	1F3F7	📦	1F4EA	📦	1F4EB	✉️	1F4EC
✉️	1F4ED	✉️	1F4EE	✉️	1F4EF	✉️	1F4DC	✉️	1F4C3
📄	1F4C4	📄	1F4D1	📄	1F9FE	📊	1F4CA	📈	1F4C8
gMaps	1F4C9	gMaps	1F5D2	gMaps	1F5D3	gMaps	1F4C6	gMaps	1F4C5
🗑️	1F5D1	🗑️	1F4C7	🗑️	1F5C3	🗑️	1F5F3	🗑️	1F5C4
📋	1F4CB	📋	1F4C1	📋	1F4C2	📋	1F5C2	📋	1F5DE
📝	1F4F0	📝	1F4D3	📝	1F4D4	📝	1F4D2	📝	1F4D5
📗	1F4D7	📗	1F4D8	📗	1F4D9	📗	1F4DA	📗	1F4D6
📎	1F516	📎	1F9F7	📎	1F517	📎	1F4CE	📎	1F587
📐	1F4D0	📐	1F4CF	📐	1F9EE	📌	1F4CC	📌	1F4CD
✂️	2702	✂️	1F58A	✂️	1F58B	✂️	2712	✂️	1F58C
🖍️	1F58D	🖍️	1F4DD	🖍️	270F	🔍	1F50D	🔍	1F50E
🔒	1F50F	🔒	1F510	🔒	1F512	🔒	1F513	❤️	2764
💔	1F494	💔	2763	💔	1F495	💔	1F49E	💔	1F493
❤️	1F497	❤️	1F496	❤️	1F498	❤️	1F49D	❤️	1F49F
☮️	262E	☮️	271D	☪️	262A	🕉️	1F549	🌐	2638

✡	2721	✡	1F52F	✡	1F54E	✡	262F	✡	2626
☛	1F6D0	☛	26CE	☛	2648	☛	2649	☛	264A
⌚	264B	⌚	264C	⌚	264D	⌚	264E	⌚	264F
♐	2650	♐	2651	♐	2652	♐	2653	♐	1F194
✳️	269B	✳️	1F251	✳️	2622	✳️	2623	✳️	1F4F4
📱	1F4F3	📱	1F236	📱	1F21A	📱	1F238	📱	1F23A
🌙	1F237	🌙	2734	🌙	1F19A	🌙	1F4AE	🌙	1F250
㊗	3299	㊗	3297	㊗	1F234	㊗	1F235	㊗	1F239
🈲	1F232	🈲	1F170	🈲	1F171	🈲	1F18E	🈲	1F191
🅾️	1F17E	🅾️	1F198	🅾️	274C	🅾️	2B55	🅾️	1F6D1
▬	26D4	▬	1F4DB	▬	1F6AB	▬	1F4AF	▬	1F4A2
♨️	2668	♨️	1F6B7	♨️	1F6AF	♨️	1F6B3	♨️	1F6B1
🚫	1F51E	🚫	1F4F5	🚫	1F6AD	🚫	2757	🚫	2753
❗	203C	❗	2049	❗	1F505	❗	1F506	❗	303D
⚠️	26A0	⚠️	1F6B8	⚠️	1F531	⚠️	269C	⚠️	1F530
♻️	267B	♻️	2705	♻️	1F22F	♻️	1F4B9	♻️	2747
✳️	2733	✳️	274E	✳️	1F310	✳️	1F4A0	✳️	24C2
💤	1F4A4	💤	1F3E7	💤	1F6BE	💤	267F	💤	1F17F
🈁	1F233	🈁	1F202	🈁	1F6C2	🈁	1F6C3	🈁	1F6C4
🚹	1F6C5	🚹	1F6B9	🚹	1F6BA	🚹	1F6BC	🚹	26A7
🚻	1F6BB	🚻	1F6AE	🚻	1F3A6	🚻	1F4F6	🚻	1F201
🆎	1F523	🆎	2139	🆎	1F524	🆎	1F521	🆎	1F520
🆖	1F196	🆖	1F197	🆖	1F199	🆖	1F192	🆖	1F195
🆓	1F193	🆓	1F522	🆓	1F0CF	🆓	1F3B4	🆓	1F004
▶	23CF	▶	25B6	▶	23F8	▶	23EF	▶	23F9
◀	23FA	◀	23ED	◀	23EE	◀	23E9	◀	23EA
↑	23EB	↑	23EC	↑	25C0	↑	1F53C	↑	1F53D
→	27A1	→	2B05	→	2B06	→	2B07	→	2197
⤵	2198	⤵	2199	⤵	2196	⤵	2195	⤵	2194
⟳	21AA	⟳	21A9	⟳	2934	⟳	2935	⟳	1F500
⟳	1F501	⟳	1F502	⟳	1F504	⟳	1F503	⟳	1F3B5
🎵	1F3B6	🎵	2795	🎵	2796	🎵	2797	🎵	2716
♾️	267E	♾️	1F4B2	♾️	1F4B1	♾️	2122	♾️	00A9
Ⓜ️	00AE	Ⓜ️	3030	Ⓜ️	27B0	Ⓜ️	27BF	Ⓜ️	1F51A
⬅️	1F519	⬅️	1F51B	⬅️	1F51D	⬅️	1F51C	⬅️	2714
✅	2611	✅	1F508	✅	1F507	✅	1F509	✅	1F50A
🔔	1F514	🔔	1F515	🔔	1F4E3	🔔	1F4E2	...	1F4AC
💭	1F4AD	💭	1F5EF	💭	2660	💭	2663	❤️	2665
♦️	2666	♦️	1F550	♦️	1F551	♦️	1F552	⌚	1F553
⌚	1F554	⌚	1F555	⌚	1F556	⌚	1F557	⌚	1F558
⌚	1F559	⌚	1F55A	⌚	1F55B	⌚	1F55C	⌚	1F55D
⌚	1F55E	⌚	1F55F	⌚	1F560	⌚	1F561	⌚	1F562
⌚	1F563	⌚	1F564	⌚	1F565	⌚	1F566	⌚	1F567

# Script Explanations

## Emoji System Editor

### Purpose

This script provides a custom editor inside Unity that allows developers to manage emoji sprite assets. It can:

- Edit both **Legacy** and **TextMeshPro (TMP)** sprite assets.
- Modify **glyph metrics** (width, height, bearings, advance, scale, atlas index).
- Cut a **texture into square segments** for creating multiple sprites quickly.
- Apply TMP sprite assets directly to all text objects in a scene.

It is mainly used for creating or editing emoji packs that can be used in Unity UI or TextMeshPro components.

### Variables and What They Do

1. **Type Enum**
  - Determines which type of emoji asset is being edited.
  - Options: Legacy or TextMeshPro.
2. **SerializedObject**
  - Represents the editor window's serialized state, allowing property changes to be tracked and applied.
3. **GUI Styles**
  - textStyle: Defines the appearance of main labels and headers.
  - foldoutStyle: Defines the appearance of foldable sections in the editor.
4. **UI State Variables**
  - scrollPosition: Keeps track of the vertical scroll inside the editor window.
  - showAssetEditor / showSpriteEditor: Booleans that toggle the visibility of editor sections.
5. **Sprite Asset References**
  - spriteAssetEdit: Reference to a Legacy sprite asset.
  - TMP\_spriteAssetEdit: Reference to a TMP sprite asset.
  - emojiType: Tracks which type of asset is currently selected.
6. **Glyph Metrics**
  - w / h: Width and height of a glyph.
  - bx / by: Horizontal bearing X and Y (offsets from the origin).
  - ad: Horizontal advance (spacing to the next glyph).
  - scale: Scale factor for the glyph.
  - atlasIndex: Index of the atlas texture where the glyph is stored.
7. **Sprite Cutting**
  - spriteEdit: The texture that can be cut into square segments.
  - size: Pixel size for each square segment.

### Window Initialization

- A menu item is added under Unity's **Window** menu called "Emoji System Editor".
- When opened, it creates or finds the editor window and optionally assigns a custom icon.
- The serialized object is initialized to allow editing of its properties.

### GUI (User Interface) Logic

1. **Main GUI Layout**
  - A scrollable editor window is created.
  - Sections are styled with headers and foldout panels.
2. **Asset Editor Section**
  - Allows the user to select the type of asset (Legacy or TMP).
  - Lets the user choose the sprite asset to edit based on type.
  - Glyph metrics editor allows the user to manually set width, height, bearings, advance, scale, and atlas index.
  - A "Save Asset" button writes changes to the asset after user confirmation.
  - For TMP assets, a **Scene Edit** section applies the selected sprite asset to all TMP text objects in the current scene.

### 3. Sprite Editor Section

- Allows cutting of a texture into square segments.
- User selects a texture and defines the square size.
- "Apply to Folder" button saves all cropped squares to a chosen folder.

## Core Methods

### 1. DrawSection

- Handles the drawing of foldable, editable sections in the editor.
- Accepts parameters for the title, visibility, editable state, and a drawing function.

### 2. SaveFile

- Saves glyph metric changes to the currently selected asset (Legacy or TMP).

### 3. UpdateGlyphMetrics

- Iterates over all glyphs in a sprite asset and updates their metrics and scale/atlas index according to the editor fields.

### 4. SaveAsset

- Marks an asset as modified and writes all changes to Unity's asset database.

### 5. ApplyToAllObjects

- Applies the selected TMP sprite asset to all TMP text objects in the active scene.
- Marks the scene as dirty so changes can be saved.

### 6. HasValidSpriteAsset

- Checks if a valid sprite asset is currently selected for editing.

### 7. CutImageIntoSquares

- Splits a texture into multiple square textures of a specified size.
- Saves each square as a PNG file in the chosen folder.
- Optimized using direct pixel arrays for speed.

### 8. LoadTextureFromAssetFile

- Attempts to load a texture directly from its asset file on disk.
- Returns a readable texture for editing purposes.

### 9. GetReadableTexture

- Creates a readable copy of a GPU texture in case the original texture is not directly editable.

## Usage Workflow

1. Open the editor via **Window → Emoji System Editor**.
2. Choose the asset type: Legacy or TextMeshPro.
3. Select the sprite asset to edit.
4. Adjust glyph metrics (width, height, bearings, advance, scale, atlas index).
5. Click **Save Asset** to apply changes.
6. If editing TMP assets, optionally click **Apply to Scene** to replace the sprite asset on all TMP text objects.
7. To create multiple emoji from a single texture, use the **Sprite Editor** section:
  - Select the texture.
  - Define the size of each square.
  - Click **Apply to Folder** to save all squares as PNG files.

## Summary

This editor streamlines the process of creating and editing emoji packs in Unity. It combines:

- Asset selection and editing.
- Precise glyph metric adjustments.
- Automated scene-wide TMP updates.
- Efficient slicing of textures into uniform square sprites.

It's essentially a one-stop editor for emoji sprite management in Unity.