

LuckyEssentialsJava

“lightweight utility plugin for minigame servers”

Intro & Goal

LuckyEssentialsJava is a lightweight utility plugin targeted for minigame servers. The goal of LuckyEssentialsJava is to make the gameplay experience better, more fun, easier, and more convenient with a light-weight plugin. LuckyEssentialsJava will help in managing server slot size, player whitelists, changing game-modes, giving potion effects, trolling other players, and much more. LuckyEssentialsJava is also cross-version compatible, starting from 1.8.9 to 1.19.X.

Who's it for?

1. **Players** - to execute commands to enhance the gameplay experience.
2. **Staff members** - to conveniently run commands to help players.
3. **Administrators** - to manage server whitelists, player slot size, death-bans, and more.

Why build it?

1. Utility plugins are always useful, whether for players, staff members, or even administrators.
2. Other utility plugins are very bloated with a lot of unwanted features, especially for minigame servers.
3. Some default commands are relatively complicated for a simple task.
4. A more flexible and advanced player selection is often required.

What is it?

Glossary

1. Main plugin
 - a. Essential commands
 - b. Plugin managing commands
 - c. Confirmation commands
2. Confirmation system module

3. Target selector module
4. Version support module
5. InvSee module
6. Configuration module

Main Plugin

The main plugin consists of 3 types of commands; essential commands, plugin managing commands, and troll commands. Most of these commands will have an alias to make them faster to type.

Some commands or its features might require a certain permission to be owned by the sender or the affected player to be executed or for the effects to be executed, these permission's prefixes will be adjustable through the configuration file of the plugin.

Essential Commands

There are 23 essential or main commands of LuckyEssentialsJava, these commands provide a broad range of features for server management.

1. Chat lock command
 - Used to enable or disable in-game chats.
 - Requires the permission "[PREFIX].chatlock"
 - Players with the permission "[PREFIX].chatlock.bypass" could bypass the in-game chat lock.
 - Usage:
 - /chatlock info
 - Check the chat-lock state.
 - /chatlock toggle [<toggle/on/off>]
 - Toggle the chat-lock state.
 - Arguments:
 - Toggle (optional, default) - toggles the chat-lock state
 - On (optional) - set the chat-lock state to on
 - Off (optional) - set the chat-lock state to off
2. Clear command
 - Clears the target's inventory contents.
 - Requires the permission "[PREFIX].clear"
 - Usage:
 - /clear [<all/hand/armor>]
 - Clears the sender's inventory
 - The sender must be a player
 - Arguments:
 - All (optional, default) - clears the player's whole inventory.
 - Hand (optional) - clears the player's hand-slot content.

- Armor (optional) - clears the player's armor contents.
- /clear <target> [<all/hand/armor>]
 - Clears a player's inventory
 - Requires the permission "[PREFIX].clear.others"
 - Arguments:
 - target (required) - the target(s) to affect.
 - All (optional, default) - clears the player's whole inventory.
 - Hand (optional) - clears the player's hand-slot content.
 - Armor (optional) - clears the player's armor contents.

3. Death kick command

- Used to enable or disable death kick.
- Players with a special permission could bypass the death kick.
- When the death kick state is enabled, all players without the bypass permission will be kicked upon death.
- Requires the permission "[PREFIX].deathkick"
- Usage:
 - /deathkick info
 - Check the death kick state.
 - /deathkick toggle [<toggle/on/off>]
 - Toggle the death kick state.
 - Arguments:
 - Toggle (optional, default) - toggles the death kick state
 - On (optional) - set the death kick state to on
 - Off (optional) - set the death kick state to off

4. Edit sign command

- Modifies the text content of a sign that the sender is looking at.
- The sender must be a player
- Requires the permission "[PREFIX].editsign"
- Usage:
 - /editsign set <line> <text>
 - Writes the text "<text>" at line <line>
 - Arguments:
 - Line - the line to edit.
 - Text - the text to be written.
 - /editsign clear [line]
 - If argument <line> is not provided, clears the whole sign content.
 - If argument <line> is provided, clear the text at line <line>.
 - Arguments:
 - Line (optional) - The line to clear.

5. Effect command

- Applies certain effect(s) to target(s).
- Requires the permission "[PREFIX].effect"
- Usage:
 - /effect set <target> <effect> [amplifier] [duration] [-s]

- Applies effect <effect> to <target>
- Arguments:
 - Target (required) - the target(s) to affect.
 - Effect (required) - the effect to apply. Format: EFFECT1,EFFECT2,... or EFFECT1:AMPLIFIER1,EFFECT2:AMPLIFIER2
 - Amplifier (optional) - the amplifier of the effect.
 - Duration (optional) - the duration of the effect.
 - -s (optional) - whether to apply the effect with notifying the target(s) or not.

■ /effect <target> clear

- Clears <target>'s potion effects.
- Arguments:
 - Target (required) - the target(s) to affect.

6. Enchant command

- Applies certain enchantment(s) to target(s).
- Requires the permission "[PREFIX].enchant"
- Usage:
 - /enchant <enchantmentOrTarget> [enchantment]
 - Applies <enchantmentOrTarget> to self or applies [enchantment] to <enchantmentOrTarget>
 - Arguments:
 - enchantmentOrTarget (required) - the enchantment or the target to affect.
 - enchantment (optional) - the enchantment to affect. Format: ENCHANTMENT:AMPLIFIER

7. Exp command

- Modifies or checks target(s)'s experience level
- Requires the permission "[PREFIX].exp"
- Usage:
 - /exp add <target> <amount>
 - Adds <target>'s experience level by <amount>
 - Arguments:
 - Target (required) - the target(s) to affect.
 - Amount (required) - the experience level amount. Format [LEVEL]L for exact level or [EXPERIENCE] for experience level(s).
 - /exp remove <target> <amount>
 - Removes <target>'s experience level by <amount>
 - Arguments:
 - Target (required) - the target(s) to affect.
 - Amount (required) - the experience level amount. Format [LEVEL]L for exact level or [EXPERIENCE] for experience level(s).

- /exp set <target> <amount>
 - Sets <target>'s experience level to <amount>
 - Arguments:
 - Target (required) - the target(s) to affect.
 - Amount (required) - the experience level amount. Format [LEVEL]L for exact level or [EXPERIENCE] for experience level(s).
- /exp check <target>
 - Checks <target>'s experience level
 - Arguments:
 - Target (required) - the target(s) to check.

8. Feed command

- Fulfills the target(s)'s hunger level and saturation level.
- Requires the permission "[PREFIX].feed"
- Usage:
 - /feed
 - Fulfills the sender's hunger level and saturation level.
 - The sender must be a player.
 - /feed <target>
 - Fulfills <target>'s hunger level and saturation level.
 - Requires the permission "[PREFIX].feed.others"
 - Arguments:
 - Target (required) - the target(s).
 - /feed <target> -s
 - Fulfills <target>'s hunger level and saturation level without notifying them.
 - Requires the permission "[PREFIX].feed.others"
 - Arguments:
 - Target (required) - the target(s).

9. Fix command

- Restores the item durability in the target's [<all/hand/armor>] slot.
- Requires the permission "[PREFIX].repair"
- Usage:
 - /fix [<all/hand/armor>]
 - Restores the item durability in the sender's [<all/hand/armor>] slot
 - The sender must be a player.
 - The sender must be a playerArguments:
 - All (optional, default) - clears the player's whole inventory.
 - Hand (optional) - clears the player's hand-slot content.
 - Armor (optional) - clears the player's armor contents.
 - /fix <target> [<all/hand/armor>]
 - Restores the item durability in the <target>'s [<all/hand/armor>] slot.
 - Requires the permission "[PREFIX].repair.others"

- Arguments:
 - Target (required) - the target(s) to affect.
 - All (optional, default) - clears the player's whole inventory.
 - Hand (optional) - clears the player's hand-slot content.
 - Armor (optional) - clears the player's armor contents.

10. Fly command

- Toggles the flight state of the target.
- Requires the permission "[PREFIX].fly"
- Usage:
 - /fly
 - Toggles the sender's flight state.
 - The sender must be a player.
 - /fly <target> [<on/off/toggle>]
 - Toggles the target's flight state.
 - Requires the permission "[PREFIX].fly.others"
 - Arguments:
 - Target (required) - the target(s).
 - Toggle (optional, default) - toggles the fly state.
 - On (optional) - set the fly state to on.
 - Off (optional) - set the fly state to off.

11. Getpos command

- Gets the target's position information
- Requires the permission "[PREFIX].getpos"
- Usage:
 - /getpos
 - Gets the sender's position information.
 - The sender must be a player.
 - /getpos <target>
 - Gets the target's position information.
 - Requires the permission "[PREFIX].getpos.others"
 - Arguments:
 - Target (required) - the target(s).

12. God command

- Toggles the invincibility state of the target.
- Requires the permission "[PREFIX].god"
- Usage:
 - /god
 - Toggles the sender's invincibility state.
 - The sender must be a player.
 - /god <target> [<on/off/toggle>]
 - Toggles the target's invincibility state.
 - Requires the permission "[PREFIX].god.others"
 - Arguments:
 - Target (required) - the target(s).

- Toggle (optional, default) - toggles the invincibility state.
- On (optional) - set the invincibility state to on.
- Off (optional) - set the invincibility state to off.

13. Heal command

- Fulfills the target(s)'s health level.
- Requires the permission "[PREFIX].heal"
- Usage:
 - /feed
 - Fulfills the sender's health level.
 - The sender must be a player.
 - /feed <target>
 - Fulfills <target>'s health level.
 - Requires the permission "[PREFIX].heal.others"
 - Arguments:
 - Target (required) - the target(s).
 - /feed <target> -s
 - Fulfills <target>'s hunger health level without notifying them.
 - Requires the permission "[PREFIX].heal.others"
 - Arguments:
 - Target (required) - the target(s).

14. Invsee command

- Check the inventory content of the target.
- Requires the permission "[PREFIX].invsee"
- Usage:
 - /invsee <target>
 - Check the inventory content of <target>.
 - Arguments:
 - Target (required) - the target(s).

15. Kick all command

- Kicks all players online on the server.
- Requires the permission "[PREFIX].kickall"
- Players with the permission "[PREFIX].kickall.bypass" will not be kicked.
- Usage:
 - /kickall
 - Kicks all online players with the default reason.
 - /kickall <reason>
 - Kicks all online players with <reason> as the reason.
 - Arguments:
 - Reason (required) - the reason to set.

16. More command

- Sets the item in the target's hand slot to a certain size.
- Requires the permission "[PREFIX].more"
- Usage:
 - /more

- Sets the item in the target's hand slot to its maximum stack size.
- The sender must be a player.
- Arguments:
 - All (optional, default) - clears the player's whole inventory.
 - Hand (optional) - clears the player's hand-slot content.
 - Armor (optional) - clears the player's armor contents.
- /more <amount>
 - Sets the item in the target's hand slot to <amount>.
 - The sender must be a player.
 - Arguments:
 - Amount (required) - the amount to set.

17. Rename command

- Sets the item name in the target's hand slot to a set name.
- Requires the permission "[PREFIX].rename"
- Usage:
 - /more <name>
 - Sets the item name in the target's hand slot to <name>.
 - The sender must be a player.
 - Arguments:
 - Name (required) - the name to set.

18. Slots command

- Modifies the server's custom player slot configuration.
- Requires the permission "[PREFIX].slots"
- Players with the permission "[PREFIX].join_full" can join the server when the custom player slot system is turned on and there is no player slot left.
- Usage:
 - /slots
 - Shows the help message.
 - /slots info
 - Shows the server's custom player slots configuration.
 - /slots set <amount>
 - Sets the server's custom player slots configuration to <amount>.
 - Arguments:
 - Amount (required) - the amount to set.
 - /slots toggle
 - Toggle the server's custom player slots state.
 - /slots on
 - Set the server's custom player slots state to on.
 - /slots off
 - Set the server's custom player slots state to off.
 - /slots reload
 - Reload the server's custom player slots configuration.

19. Smite command

- Strikes lighting at a certain position.

- Requires the permission “[PREFIX].smite”
- Usage:
 - /smite
 - Strikes lighting at where the sender is looking at.
 - The sender must be a player.
 - /smite <target>
 - Strikes lighting at the target’s position.
 - Arguments:
 - Target (required) - the target(s).
 - /smite <target> -s
 - Strikes lighting at the target’s position without notifying them.
 - Arguments:
 - Target (required) - the target(s).

20. Spawn mob command

- Spawns a certain mob at a certain location.
- Requires the permission “[PREFIX].spawnmob”
- Usage:
 - /spawnmob <mob>
 - Spawns <mob> at the sender’s location.
 - The sender must be a player.
 - Arguments:
 - Mob - the mob to spawn.
 - /spawnmob <mob> <amount>
 - Spawns <amount>x <mob> at the sender’s location.
 - The sender must be a player.
 - Arguments:
 - Mob - the mob to spawn.
 - Amount - the amount to spawn.
 - /spawnmob <target> <mob>
 - Spawns <mob> at the target’s location.
 - Arguments:
 - Target (required) - the target(s).
 - Mob - the mob to spawn.
 - /spawnmob <target> <mob> <amount>
 - Spawns <amount>x <mob> at the target’s location.
 - Arguments:
 - Target (required) - the target(s).
 - Mob - the mob to spawn.
 - Amount - the amount to spawn.

21. Speed command

- Sets a certain speed type to a certain level.
- Requires the permission “[PREFIX].speed”
- Usage:
 - /speed <target> <speedType> <speed>

- Sets the target's speedType to <speed>
- Arguments:
 - Target (required) - the target(s).
 - SpeedType - the speed type, can be 'walking' or 'flying'.
 - Speed - the speed, from 1 to 10.

22. Top command

- Teleports the target to the highest block of their current location.
- Requires the permission "[PREFIX].top"
- Usage:
 - /top
 - Teleports the sender to the highest block of their current location.
 - The sender must be a player.
 - /top <target>
 - Teleports the target to the highest block of their current location.
 - Requires the permission "[PREFIX].top.others"
 - Arguments:
 - Target (required) - the target(s).
 - /top <target> -s
 - Teleports the target to the highest block of their current location without notifying them.
 - Requires the permission "[PREFIX].top.others"
 - Arguments:
 - Target (required) - the target(s).

23. Whitelist command

- Modifies the server's whitelist configuration.
- Requires the permission "[PREFIX].whitelist"
- Usage:
 - /whitelist
 - Shows the help message.
 - /whitelist info
 - Shows the server's whitelist configuration.
 - /whitelist list [page]
 - Shows all whitelisted players with a pagination system.
 - Arguments:
 - Page (optional, default 1) - the pagination page.
 - /whitelist add <player>
 - Adds <player> to the whitelist list.
 - Arguments:
 - Player (required) - the target to be affected.
 - /whitelist remove <player>
 - Removes <player> from the whitelist list.
 - Arguments:
 - Player (required) - the target to be affected.
 - /whitelist checks <player>

- Checks whether <player> is in the whitelist list.
- Arguments:
 - Player (required) - the target to be affected.
- /whitelist toggle
 - Toggle the server's whitelist state.
- /whitelist on
 - Set the server's whitelist state to on.
- /whitelist off
 - Set the server's whitelist state to off.
- /whitelist reload
 - Reload the server's whitelist configuration.

Plugin Managing Commands

There are 11 plugin managing commands.

1. /pluginmanager
 - a. Shows the help message.
 - b. Requires the "[PREFIX].pluginmanager" command.
2. /pluginmanager enable <plugin>
 - a. Enables <plugin>.
 - b. Requires the "[PREFIX].pluginmanager.enable" permission.
 - c. Arguments:
 - i. Plugin (required) - the plugin to affect.
3. /pluginmanager disable <plugin>
 - a. Disables <plugin>.
 - b. Requires the "[PREFIX].pluginmanager.disable" permission.
 - c. Arguments:
 - i. Plugin (required) - the plugin to affect.
4. /pluginmanager restart <plugin>
 - a. Restarts <plugin>.
 - b. Requires the "[PREFIX].pluginmanager.restart" permission.
 - c. Arguments:
 - i. Plugin (required) - the plugin to affect.
5. /pluginmanager usage <plugin>
 - a. Shows the commands registered to <plugin>.
 - b. Requires the "[PREFIX].pluginmanager.usage" permission.
 - c. Arguments:
 - i. Plugin (required) - the plugin to affect.
6. /pluginmanager lookup <command>
 - a. Look up the plugin that handles <command>.
 - b. Requires the "[PREFIX].pluginmanager.command" permission.
 - c. Arguments:
 - i. Command (required) - the command to look up.
7. /pluginmanager load <pluginPath>

- a. Loads <pluginPath>.
 - b. Requires the "[PREFIX].pluginmanager.load" permission.
 - c. Arguments:
 - i. PluginPath (required) - the path to the plugin to affect.
- 8. /pluginmanager unload <plugin>
 - a. Unloads <plugin>.
 - b. Requires the "[PREFIX].pluginmanager.unload" permission.
 - c. Arguments:
 - i. Plugin (required) - the plugin to affect.
- 9. /pluginmanager reload <plugin>
 - a. Reloads <plugin>.
 - b. Requires the "[PREFIX].pluginmanager.reload" permission.
 - c. Arguments:
 - i. Plugin (required) - the plugin to affect.
- 10. /pluginmanager info <plugin>
 - a. Shows information about <plugin>.
 - b. Requires the "[PREFIX].pluginmanager.info" permission.
 - c. Arguments:
 - i. Plugin (required) - the plugin to affect.
- 11. /pluginmanager list
 - a. Shows all loaded plugins
 - b. Requires the "[PREFIX].pluginmanager.list" permission.

Confirmation Commands

These commands are used for the Confirmation System Module.

- 1. /luckyessentials confirm
 - a. Confirms the action.
- 2. /luckyessentials cancel
 - a. Cancels the action.

Confirmation System Module

Commands that affect a lot of players will need to be re-confirmed by the sender to be executed.

These are the criteria for a command to require a second confirmation from the sender:

- If the command's target size is more than equal 75 players.
- If the command's executor is a player:
 - If at least one of the command's target locations is located in a different world from the sender.
 - If at least one of the command's target locations is located more than 100 blocks away from the sender.

LuckyEssentialsJava will ask for a confirmation from the sender, if the sender confirms the action, then the command will be executed, if the sender cancels the action, then the command will not be executed.

Target Selector Module

One of the key features of LuckyEssentialsJava is its target selector system, the command executor can easily choose one to an array of targets.

Here's the keyword for the target selector:

- Self - The target selector will return the sender as the target.
- * - The target selector will return all players online in the server as the target.
- *[n=number] - The target selector will return a certain number of players online in the server as the target.
- *[r=number,n=number] - The target selector will return a certain number of players in a certain radius from the sender as the target.
- @a - The target selector will return all players online in the server as the target.
- @a[r=number] - The target selector will return all players in a certain radius from the sender as the target.
- @a[n=number] - The target selector will return a certain number of players online in the server as the target.
- @a[r=number,n=number] - The target selector will return a certain number of players in a certain radius from the sender as the target.
- @r - The target selector will return one random online player on the server as the target.
- @r[n=number] - The target selector will return a certain number of random players online in the server as the target.
- @r[r=number,n=number] - The target selector will return a certain number of random players in a certain radius from the sender as the target.

Keywords that take radius into account will require the sender to be a player.

Example usage:

/heal @a → this will heal all players online on the server.

/heal @a[r=20] → this will heal all players in a radius of 20 blocks of the sender.

Version Support Module

LuckyEssentialsJava is designed to support from version 1.8.9 to 1.19.X. The Version Support Module is used to automatically translate item names, enchantment names, potion effect names, and bukkit methods throughout its supported versions.

InvSee Module

The invsee module provides the ability to peek into another player's inventory. There are two modes for the invsee module.

1. Normal
 - a. The normal mode will sync the other player's inventory and its preview every 5 ticks, this enables real-time inventory update and modification. The normal mode also shows the other player's additional information, such as the location, potion effect, health, hunger, etc.
2. Legacy
 - a. The legacy mode will only sync the other player's inventory to its preview every game tick, this allows super fast inventory update, but not modification.

Configuration Module

There are 3 (three) configuration files for LuckyEssentialsJava. The configuration files are in the YAML format.

1. Main config
 - a. The main config is used to configure the plugin's main features and to store several states, such as the chat lock state and death-kick state.
 - b. Keys:
 - i. Prefix - the prefix for command feedback messages and permissions.
 - ii. Rightclick-invsee - if true, upon right-clicking another player, vanished players with the permission "[PREFIX].invsee.rightclick" will automatically open the right-clicked player's inventory.
 - iii. Use-confirmation - if true, the confirmation module is enabled, requiring second confirmation by the command sender for sensitive commands.
 - iv. Chat-lock - if true, the chat-lock state is enabled.
 - v. Old-invsee - if true, the invsee system will use the legacy method which.
 - vi. Death-kick - if true, the death-kick state is enabled.
 - vii. Fly-on-join - if true, players with the permission "[PREFIX].fly_on_join" will automatically have their flight state to 'on' upon joining the server.
2. Slots config
 - a. The main config is used to store the plugin's slots feature configuration.
 - b. Keys:
 - i. Toggled - the state of the slots feature.
 - ii. Deny-message - the message when a player is denied entry due to the server running out of player slots.
 - iii. Max-players - the custom maximum number of online players allowed in the server.
3. Whitelist config
 - a. The main config is used to store the plugin's whitelist feature configuration.
 - b. Keys:
 - i. Toggled - the state of the whitelist feature.
 - ii. Deny-message - the message when a player is denied entry due them not being in the whitelist.

- iii. Check-mode - the check mode of the whitelist system. Available values:
 - 1. NAME - will only check the name of the player
 - 2. UUID - will only check the UUID of the player
 - 3. BOTH - will check both the name and the UUID of the player
- iv. Permission - the permission(s) required for entry. Value is an array.
- v. <name> - the player key that is in the whitelist. Sub-value:
 - 1. Name: The player name.
 - 2. UUID: the player UUID.

Brainstormed Ideas

- 1. More Quality of Life additional commands both for moderators, admin, and normal users.

Competitors & Product Inspiration

- 1. [EssentialsX](#) - has more features, but is heavier and more bloated.
- 2. [CMI](#) - has much more features, but is much heavier and much more bloated.
- 3. [LuckyEssentials](#) - has less features, requires kotlin to be loaded in runtime.

Seeding Users & Content

Source code will be open source so anybody can submit a pull request to contribute to the project.