ISOMAKER
README

Epitech EIP 2024/2025

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IsoMaker is a game engine for creating isometric games. It is written in C++ and uses the Raylib for rendering.

C++ CODING STYLE

The foundation of the coding style applied to this project is a C++ adapatation of Epitech's C coding style, here are the main rules:

NAMING CONVENTIONS

• All subdirectories and files under the /src and /includes directories should have one word names when possible. These, as well as classes, should follow the UpperCamelCase naming convention, which dictates every compound word in a name is capitalized.
• Interfaces and abstract classes must have names starting with a capital I and A respectively (e.g., IHandler, AHandler).
• Namespaces, functions and variables should follow the lowerCamelCase naming convention, which dictates the first compound word should start with a lowercase, and every compound word after that should be capitalized (e.g., input::KeyboardHandler::startLoop(bool status)).

PROJECT FOLDER ARCHITECTURE

• .hpp files containing interfaces, abstract class implementations, project specific variable types and other such things should be found in /includes/<subdirectory> (e.g., IHandler.hpp, AHandler.hpp and Types.hpp in /includes/Input).
• .cpp source files required for building the project should be found in /src/<subdirectory>, along with their respective .hpp files. (e.g., Keyboard.cpp and Keyboard.hpp in /src/Input).

FILES

• All files should start with the standard Epitech header provided by the official Epitech header extension on VSCode.
• Contents of .hpp files should be preceded by #pragma once.
• All files should end with \n (newline).

CLASSES

• A class' **access specifiers** should be written in the following order: public, protected, private.
• **Function prototypes** should be declared before **variables**.
• **Class variable names** should start with an underscore (e.g., _position, _size, _scale).

COMMIT MESSAGE STANDARD

All commits contributing to this project must be accompanied by a commit message that adheres to the following format, based on the Conventional Commits standard:

<type>(<scope>): <description>

STRUCTURE

- **type**: Describes the purpose of the commit. Use one of the following predefined types:
    - **feat**: A new feature.
    - **fix**: A bug fix.
    - **refacto**: Code changes that neither fix a bug nor add a feature.
    - **doc**: Documentation changes (e.g., README updates).
    - **style**: Code style changes (e.g., formatting, missing semicolons) that do not affect functionality.
    - **test**: Adding or updating tests.
    - **build**: Maintenance tasks (e.g., build scripts, dependency updates).

- **scope**: Identifies the specific area of the codebase affected. Keep it concise, such as:
    - A module name (e.g., graphics, input handling).
    - A component name (e.g., button, keyboard handler).
    - Use * for a global change affecting multiple areas.

- **description**: A brief, imperative summary of the change.
    - Start with a verb in the present tense (e.g., add, fix, update).
    - Don’t capitalize the first letter or end with a period.

Examples

Adding a new feature: feat(input handling): add support for joypad controls

Fixing a bug: fix(graphics): resolve crash on object rendering

Updating documentation: doc(readme): improve commit convention examples

Refactoring code: refacto(engine): simplify event loop logic

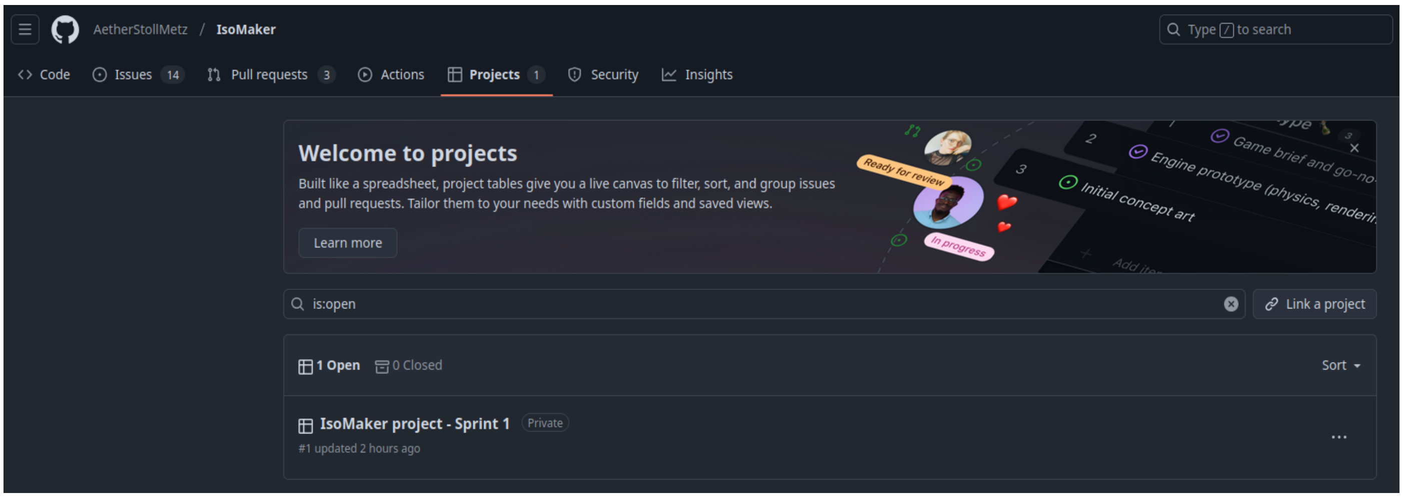
Updating tests: test(graphics): add tests for sprite rendering

WHY USE THIS FORMAT ?

- **Clarity**: Makes it easier to understand what a commit does at a glance.
- **Automation**: Supports tools for generating changelogs and release notes.
- **Consistency**: Encourages contributors to document changes uniformly.

HOW TO ADD A FEATURE AND PULL REQUEST 101

1. Access the repository’s Github Project



Welcome to projects

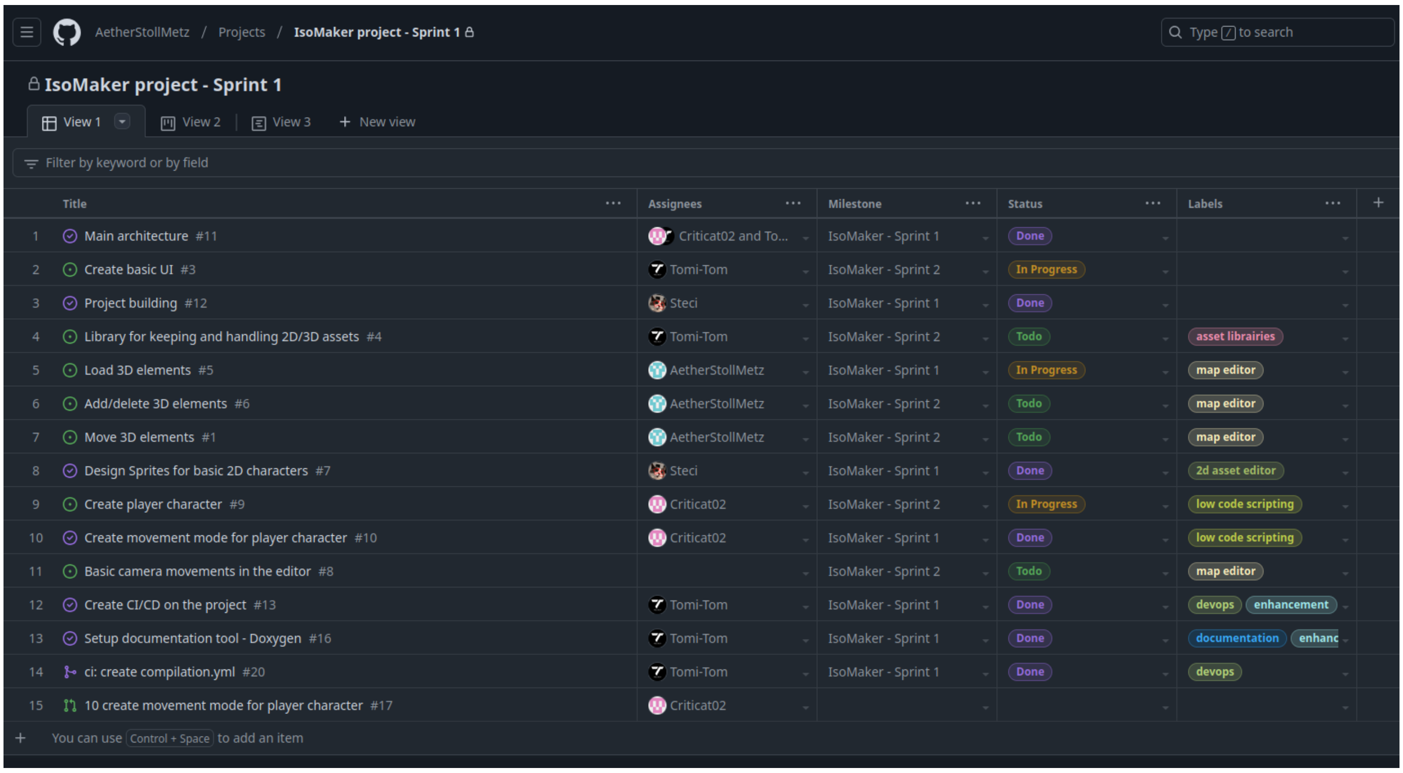
Built like a spreadsheet, project tables give you a live canvas to filter, sort, and group issues and pull requests. Tailor them to your needs with custom fields and saved views.

is:open

1 Open 0 Closed

IsoMaker project - Sprint 1 Private
#1 updated 2 hours ago

2. Add an item to the list

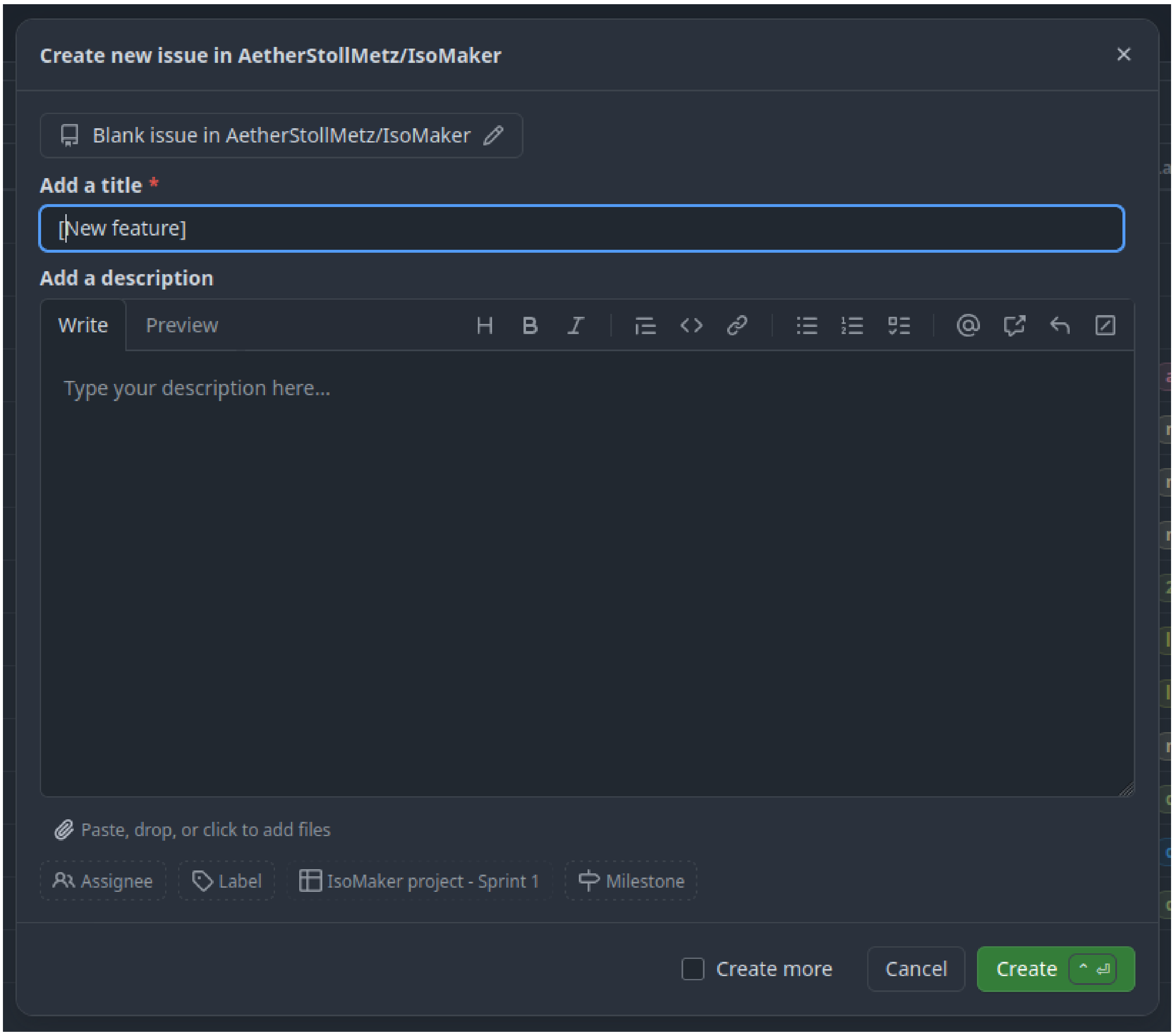

AetherStollMetz / Projects / IsoMaker project - Sprint 1
Type / to search
View 1
View 2
View 3
New view
Filter by keyword or by field

IsoMaker project - Sprint 1

	Title	Assignees	Milestone	Status	Labels
1	Main architecture #11	Criticat02 and To...	IsoMaker - Sprint 1	Done	
2	Create basic UI #3	Tomi-Tom	IsoMaker - Sprint 2	In Progress	
3	Project building #12	Steci	IsoMaker - Sprint 1	Done	
4	Library for keeping and handling 2D/3D assets #4	Tomi-Tom	IsoMaker - Sprint 2	Todo	asset librairies
5	Load 3D elements #5	AetherStollMetz	IsoMaker - Sprint 1	In Progress	map editor
6	Add/delete 3D elements #6	AetherStollMetz	IsoMaker - Sprint 2	Todo	map editor
7	Move 3D elements #1	AetherStollMetz	IsoMaker - Sprint 2	Todo	map editor
8	Design Sprites for basic 2D characters #7	Steci	IsoMaker - Sprint 1	Done	2d asset editor
9	Create player character #9	Criticat02	IsoMaker - Sprint 2	In Progress	low code scripting
10	Create movement mode for player character #10	Criticat02	IsoMaker - Sprint 1	Done	low code scripting
11	Basic camera movements in the editor #8		IsoMaker - Sprint 2	Todo	map editor
12	Create CI/CD on the project #13	Tomi-Tom	IsoMaker - Sprint 1	Done	devops enhancement
13	Setup documentation tool - Doxygen #16	Tomi-Tom	IsoMaker - Sprint 1	Done	documentation enhanc
14	ci: create compilation.yml #20	Tomi-Tom	IsoMaker - Sprint 1	Done	devops
15	10 create movement mode for player character #17	Criticat02			

+ You can use Control + Space to add an item

3. Name it and add a description



Create new issue in AetherStollMetz/IsoMaker

Blank issue in AetherStollMetz/IsoMaker

Add a title *

[New feature]

Add a description

Write Preview

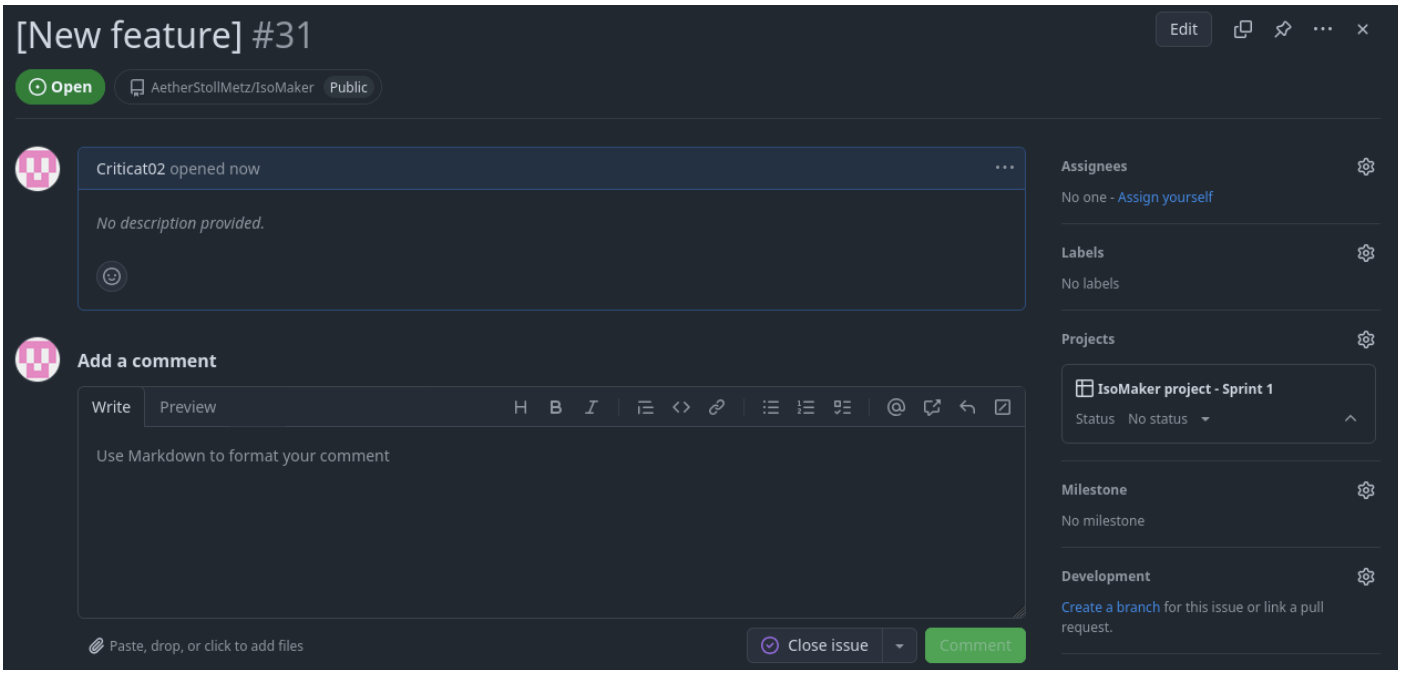
Type your description here...

Paste, drop, or click to add files

Assignee Label IsoMaker project - Sprint 1 Milestone

Create more Cancel Create

4. Click on the inexplicably small Create a branch



[New feature] #31

Open AetherStollMetz/IsoMaker Public

Edit

Criticat02 opened now

No description provided.

Add a comment

Write Preview

Use Markdown to format your comment

Paste, drop, or click to add files

Close issue Comment

Assignees
No one - Assign yourself

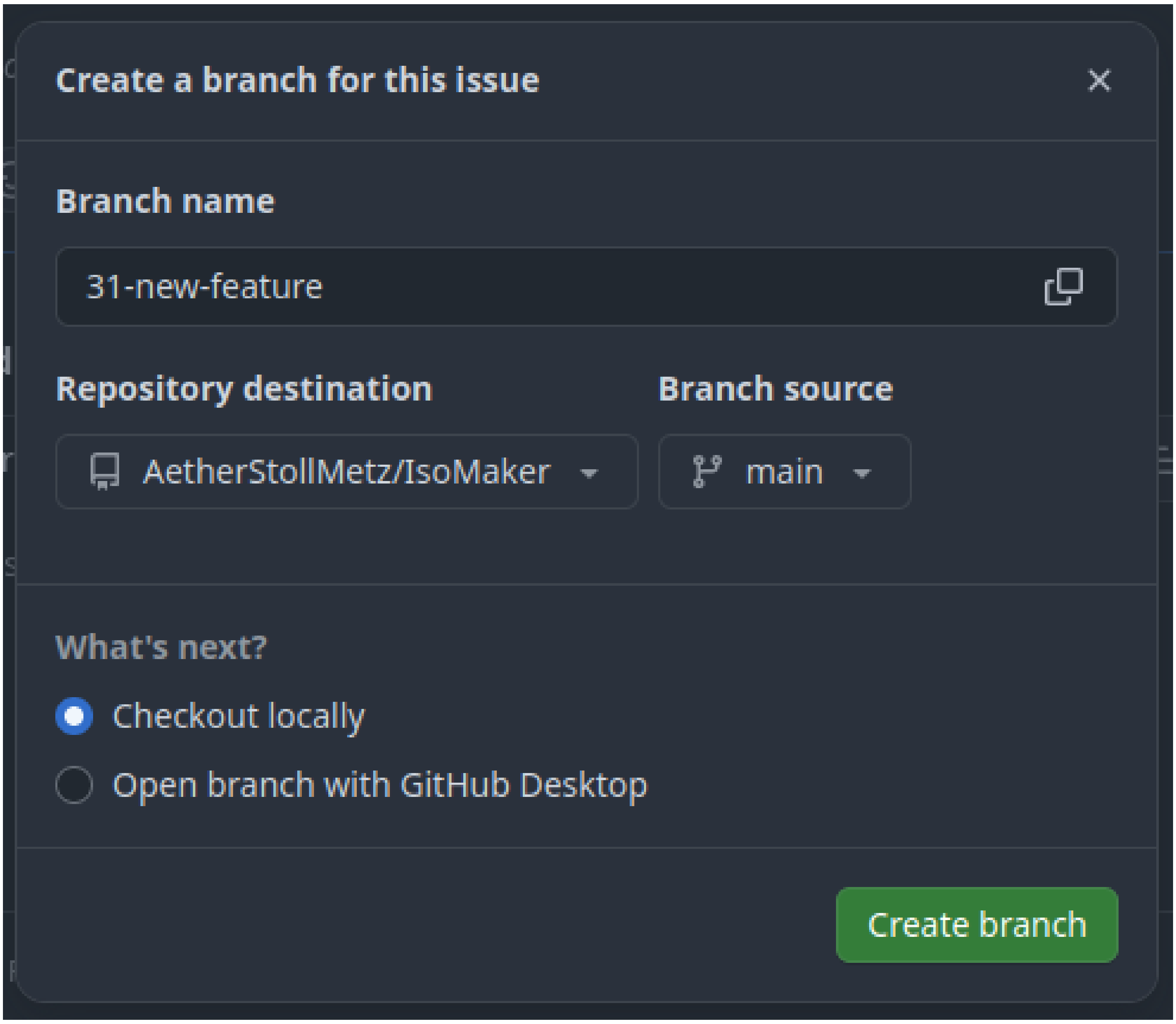
Labels
No labels

Projects
IsoMaker project - Sprint 1
Status No status

Milestone
No milestone

Development
Create a branch for this issue or link a pull request.

5. You may want to make the source branch different from main, otherwise leave every-thing as is and create branch


Create a branch for this issue

Branch name

31-new-feature

Repository destination AetherStollMetz/IsoMaker

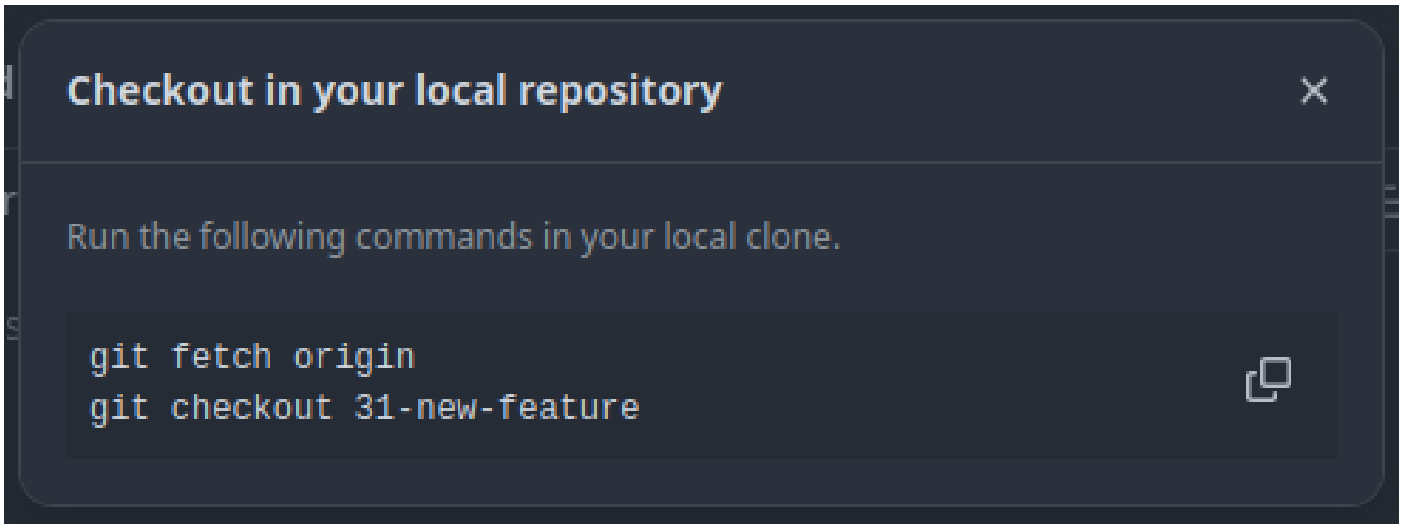
Branch source main

What's next?

[✓ Checkout locally]

Open branch with GitHub Desktop

6. Check out locally and code your feature (make sure to respect the commit message standard when pushing onto the branch)


Checkout in your local repository

Run the following commands in your local clone.

```
git fetch origin
git checkout 31-new-feature
```