

StoryComposerAI: Supporting Human-AI Story Co-Creation Through Decomposition and Linking

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Problem

In GenAI Story Creation:

- Hard to control individual elements
- Inconsistent outputs across scenes
- Limited support for iterative editing

Decomposition

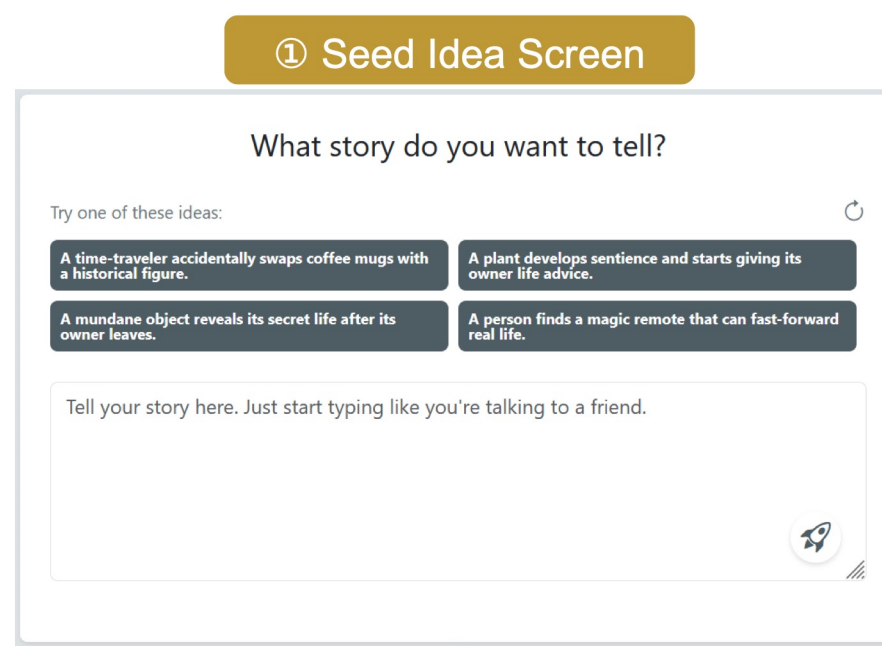
- Breaks stories down into editable components, such as locations, personas, scenes, and storyline
- Allows editing of specific components, rather than having to regenerate the entire story.
- By using selective regeneration, the tool only regenerates images (the bulk of work) that contain that component
- For example, if Blaze the bunny is edited, only images containing Blaze will be regenerated

Linking

- Links components both in the user interface and in the background of the tool
- In the interface, every time a component is named (like Blaze) the name is linked to the page where it can be edited
- Behind the scenes, components are linked, being strung together to make prompts
- This means if Blaze is edited, the change is reflected in every part of the story

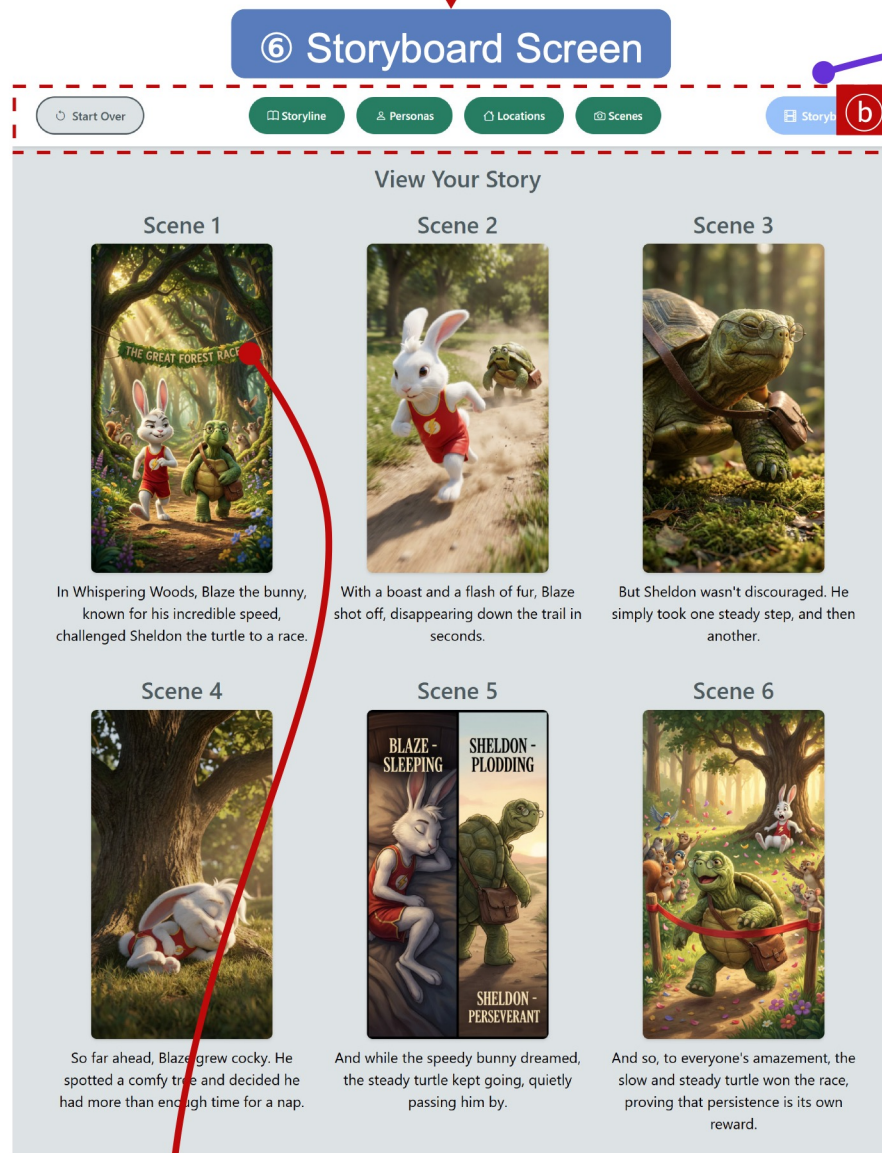


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Add user's own idea, or use the AI-suggested idea.

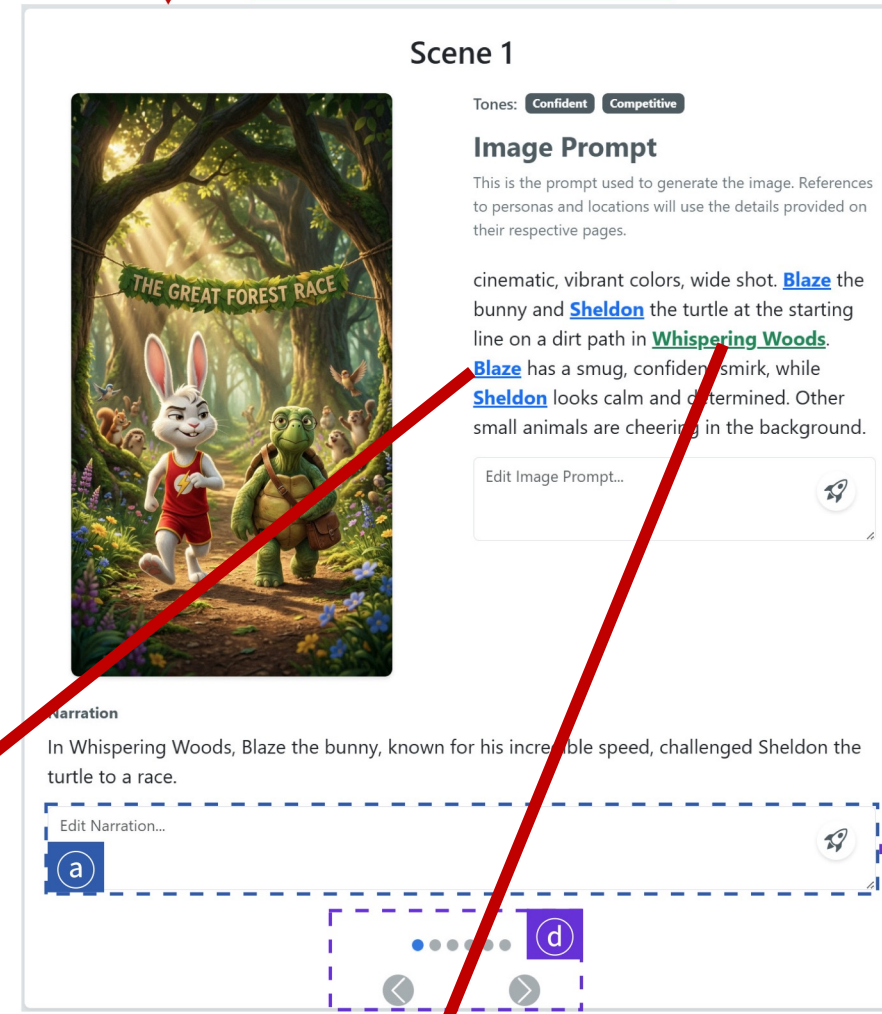
Gemini generate



Navigate to component edit pages, available on all edit pages.



Scene Edit Screen

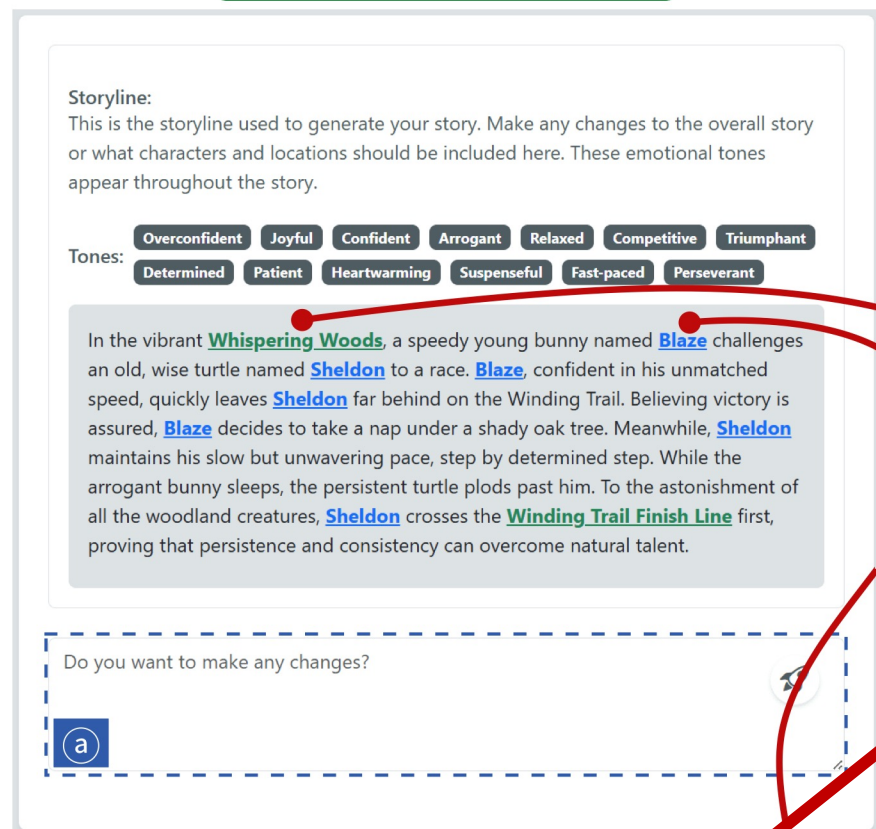


Decompose-and-Link Creative Intent (DLCI)

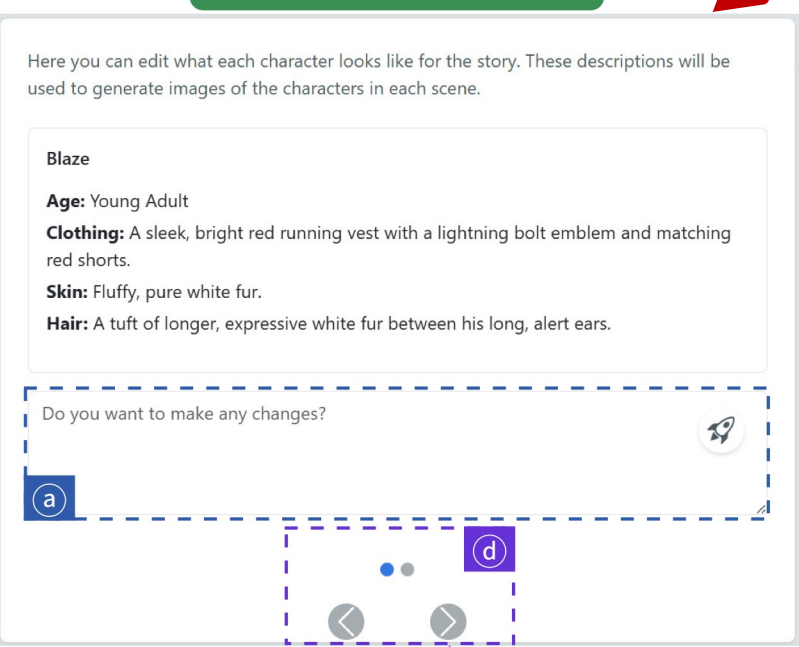
- **Decompose** stories into editable components
- **Link** components to maintain coherence
- **Enable control** over AI-generated outputs

Instruct Gemini to modify the component

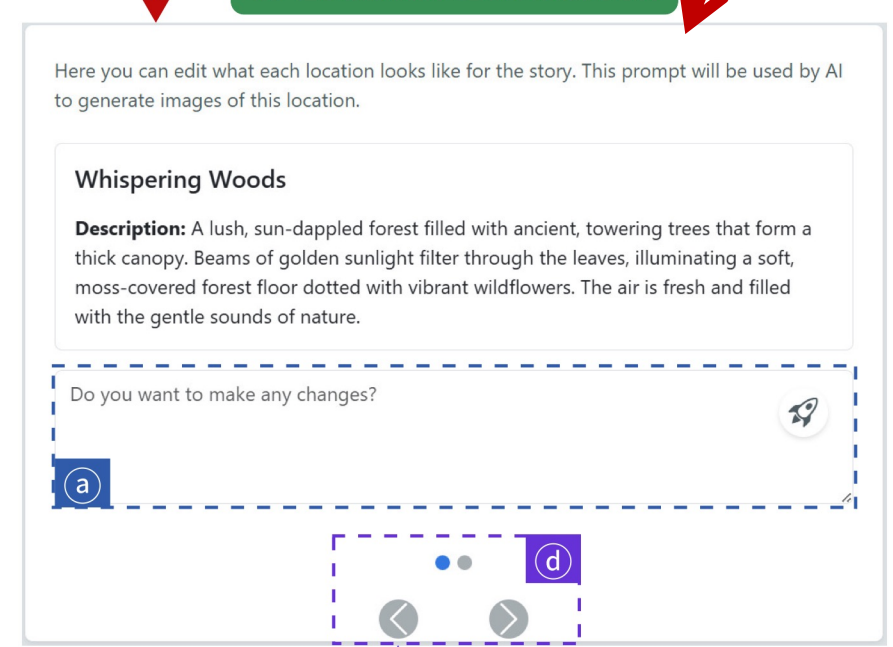
Storyline Edit Screen



Persona Edit Screen



Location Edit Screen



Navigate to different components

Based on a user study with 5 participants completing story creation tasks and semi-structured interviews:

Key Insights

- Decomposing into personas, locations, and scenes enables targeted and selective revisions that afford greater creative agency.
- Users prefer to negotiate the visual presentation of story components directly with AI.
- The tool was not used to ideate outright, rather participants used it to develop and refine ideas they already had.