

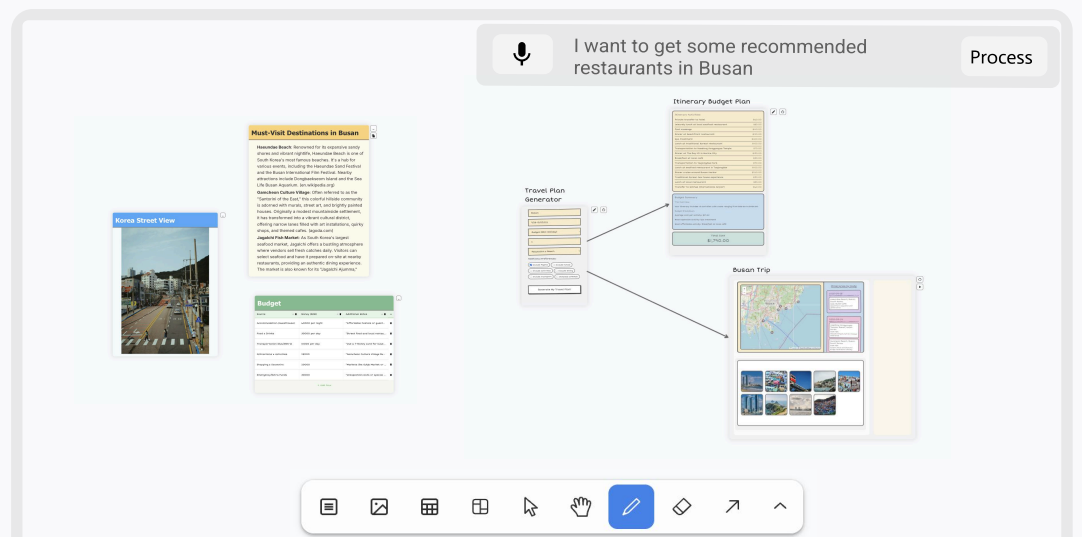
# TaskArtisan: Flexible Authoring and Manipulation of Task-specific Interactive Widgets via Sketch and Voice

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## Motivation

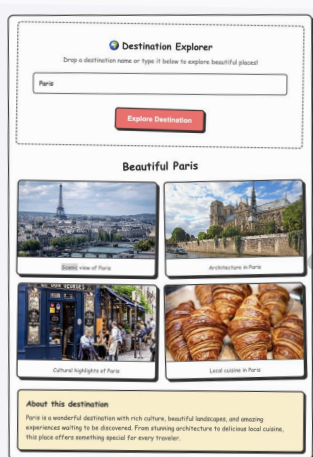
- People weave many separate tools together to complete tasks like analyses and planning.
- Current AI-powered code generation tools such as Claude Artifact enable users to create GUI tools yet the generated tools are self-contained and cannot fluidly bind to evolving data.
- We aim to enable users to freely and easily author **task-specific interoperable GUI widgets** that can be directly used or assembled

## Interface



Task Artisan is an infinite canvas where users can freely manipulate **content** (data objects that are relevant to the work) and **widgets** (interactive GUI objects that users author and can interact with content.)

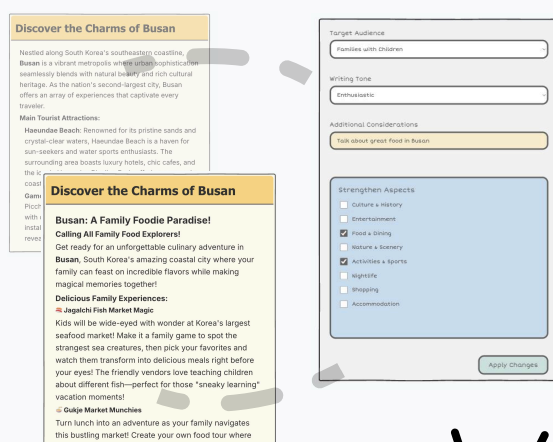
## Widgets



**Composer** widgets create new content based on user-provided context and parameters

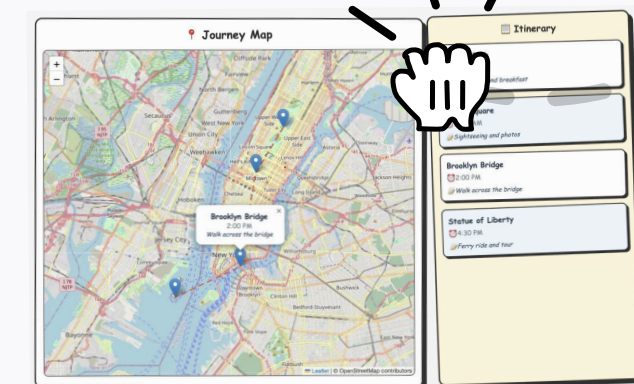
## Composer

**Shaper** widgets modify (e.g., summarize, edit, or extent) the input content



## Shaper

**Viewer** widgets display or present existing content in new representations

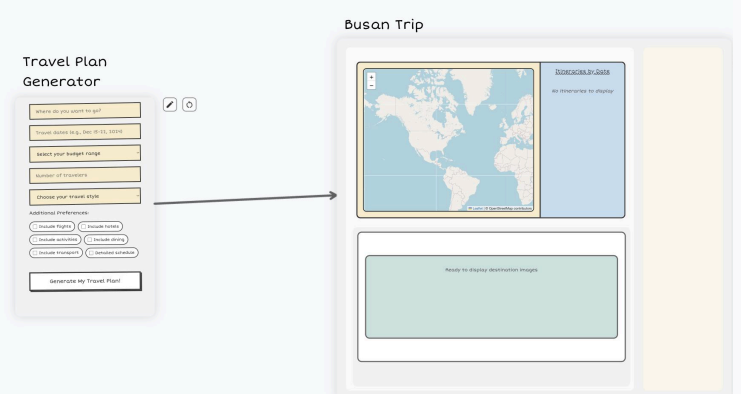


## Viewer

## Interactions

Users can assemble multiple widgets for sequential (**arrow**) or batch (**container**) data processing

2



Users can use **sketch** and **description** to author the widget and then drag the content on the widget to process.

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I want to see all the stops in our New York trip on a map here...



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