MIC Documentation

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1 MIC MVP Release v2.0.0-beta

1.1 Introduction

This is a MVP release of a brand new version of **Map in Color (MIC) v2.0.0-beta**, a tool for creating **choropleth maps** to visualize data—whether for scientific purposes or simply to see the world from a new perspective through data.

With the new version, the application includes more complexity and a sharing platform where data can be shared between users. Instead of manually selecting and defining states from select inputs (as seen in v1), you prepare a CSV file locally with all the data for the map, ensuring simplicity.

This MVP release features:

- A **set of three maps** (World Map, United States, and Europe) – with more to be added over time.

- The ability to **instantly generate data ranges** with ease (either suggested or manually defined).

- A **sharing platform** with tags for potential future data collection across diverse subjects, browsable via an *explore* page.

- **Public or private** map settings for each user's preference.

- User profiles that allow **personal info**, **stars**, and **comments** on maps.

2 Quick Start (For Users)

1. **Sign Up**

   Go to mapincolor.com and fill out the sign-up form. After a successful registration, you will be taken to your **Dashboard**.

2. **Create Your First Map**

   - Use the sidebar or header to click **"Create New Map."**
   - Select which map template you want (World, USA, or Europe) in the pop-up.

- Click **"Create"**. You will be taken to the **Data Integration** page.

3. **Data Integration**

   - Prepare your CSV file (see details below) and upload it.
   - Define data ranges (either by manual input or by generating suggested ranges).
   - Adjust colors and theme settings (ocean color, unassigned states, etc.).
   - Fill out **map details** (title, description, tags, references).

4. **Save & Share**

   - Choose **public** or **private** for your map.
   - Click **"Save Map"**.
   - You can now view or edit your map from your collection, explore other maps, star, and comment.

3 How to Create and Edit Maps

When you navigate to the **Data Integration** page, have your CSV file ready. It must contain **exactly two columns**:

1. Country/State Name

2. Value

No values can be empty.

Example CSV

```
Country/State Name,Value
State1,Value1
State2,Value2
...
```

If your CSV is successfully uploaded, you may see summary statistics about the file.

3.1 Error Handling

If a state name isn't recognized or the file is invalid, you'll see an **error log** showing the line number and the issue:

Fix any errors and re-upload until you see a success message:

File Name	hdi.csv
Lowest Value	0.38
State (Lowest)	Somalia
Highest Value	0.967
State (Highest)	Switzerland
Average Value	0.72
Median Value	0.74
Standard Deviation	0.15
Values Count	193
Total Countries	245
Data Completeness (%)	78.78

Mynd 1: Statistics Example

Upload Your CSV
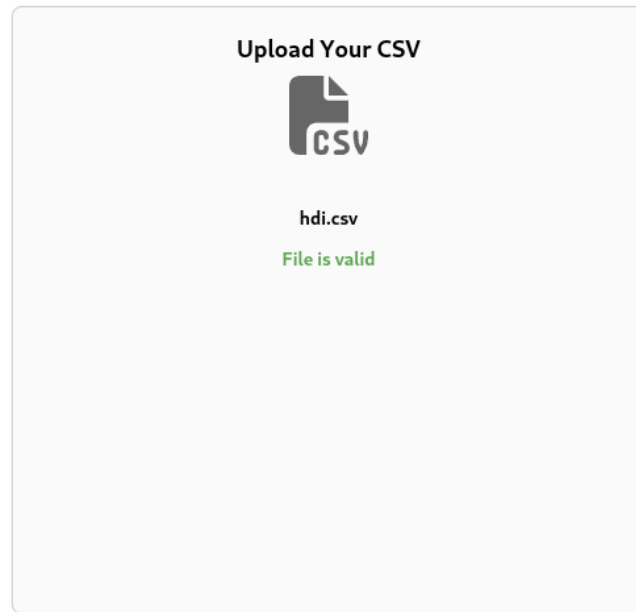
hdi.csv

File is not valid

There are 3 errors:

Line 3: Country/State "Riceland" is invalid.
Line 15: Value "twenty one" is not a valid number.
Line 19: Country/State "East Korea" is invalid.

Download Error Log

Mynd 2: Error Log Example

Mynd 3: Valid CSV Example

4 Defining Ranges

4.1 Suggested vs. Manual

- **Manual**: Type in your lower and upper bounds for each range.

- **Auto-Generate**: Specify how many ranges you want and click **"Suggest range"**.

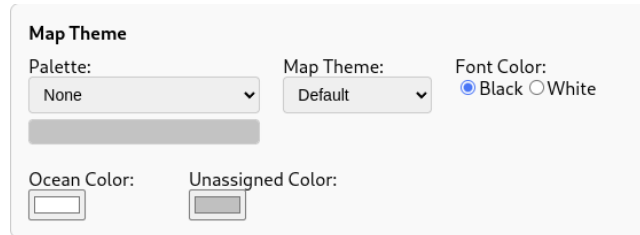For example, you can press certain buttons to define or suggest ranges:
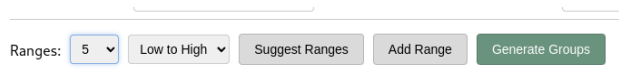
Mynd 4: Range Buttons Example

4.2 Name & Coloring

Name each range (e.g., "Low," "Medium," "High," etc.). Choose individual colors or use a provided **color palette**. Then click **"Generate Groups"** to update the map with the new ranges.

5 Theme & Final Settings
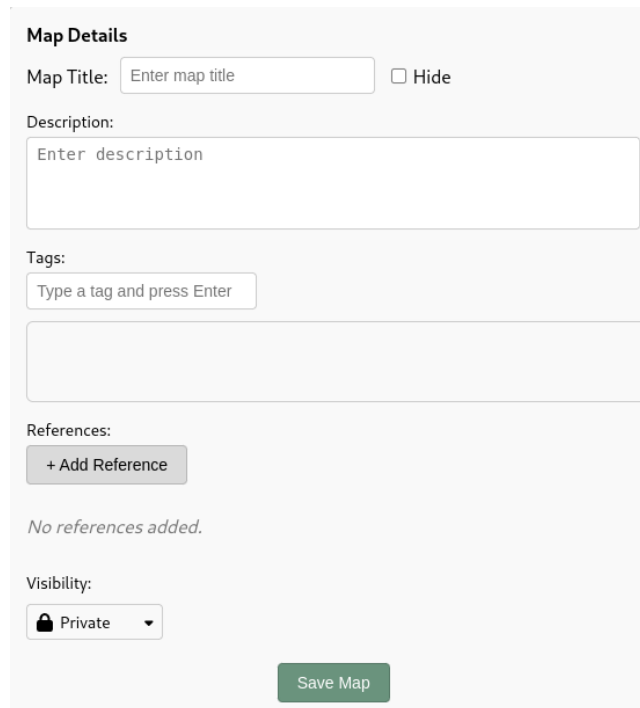
You can adjust map details: **ocean color**, **unassigned color**, etc. For example:

Mynd 5: Theme Settings Example

Then fill out **title**, **description**, **tags**, **references**, and decide if the map is private or public:

Mynd 6: Map Details Example

Finally, press **"Save Map"**. The map is now in your collection, and you can edit it anytime.

Once saved, you can **star** or **comment** on maps, explore other users' public maps, and further customize your own.