Board Game Mechanics: Grouping & Comparison via Visual Analytics

Task 2.1: Group ratings by mechanics to reveal preferences

Task 2.2: Compare board games using LDA to explore similarities/differences

Girish: Setup (0.25 hrs), Design (0.50 hrs), Preprocessing (0.50 hrs), D3 visualization (1.5 hrs), Storyboard (1.0 hrs)

Why these tasks?

- Task 2.1 (Group):
  "Which mechanics tend to be rated higher?"
  📌 Useful for developers to quickly identify popular mechanics to include in a new game.

- Task 2.2 (Compare):
  "How are games positioned in mechanic space?"
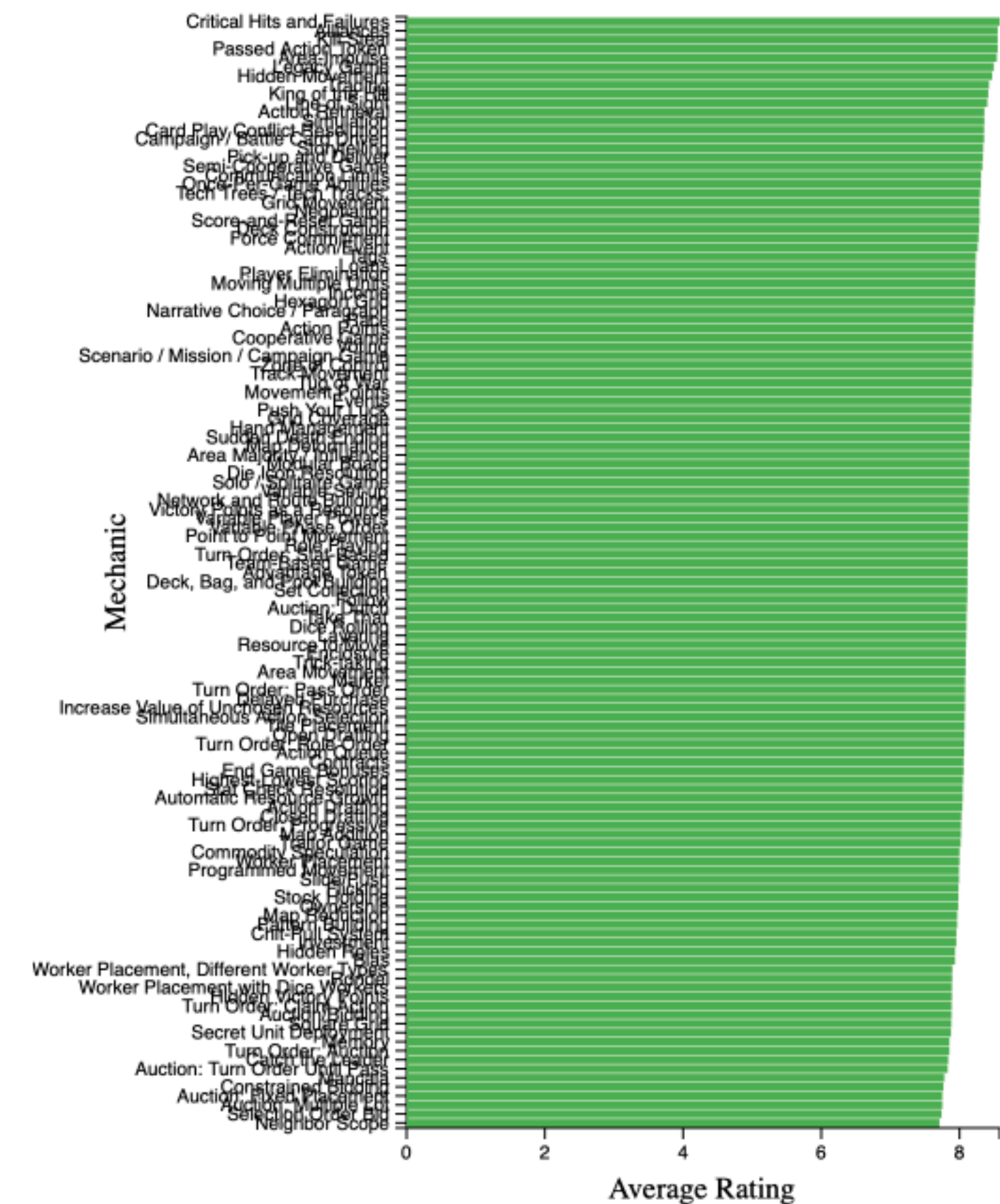 📌 Helps identify outliers or overlaps—useful for positioning a new game.

How are these helpful?

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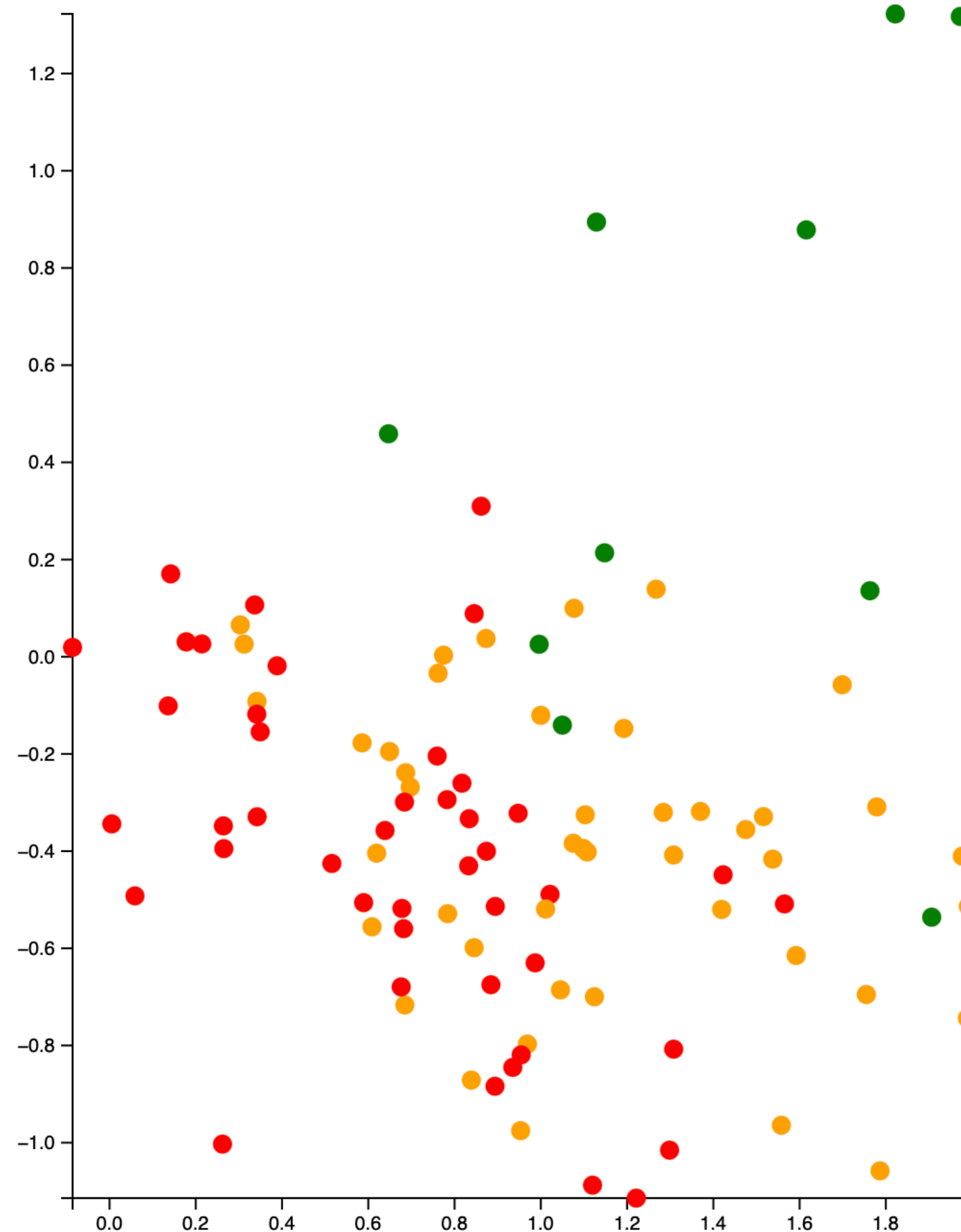

Visualization: Horizontal Bar Chart

Group -> Summarize -> Filter

Mechanics with higher average most likely to be well received!!

How are these helpful?

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Visualization: Scatterplot

One-hot encoding -> Project -> Compare -> Explore similarities

Similar games closer together and separation between rating classes!!

Demo

http://localhost:3000

What could be improved?

- Task 2.1 (Group):
  📌 Filtering based on year and review count to understand trends during specific timelines more reliably

- Task 2.2 (Compare):
  📌 Ability to change number of principal components chosen
  📌 Filtering by category to explore mechanical similarities inside a specific game theme

- General
  📌 Fancier interactions and colors