# Instructions

### Xero Assessment: Edward Jin's Submission

#### **Prerequisites**

1. **Install R**: Ensure R version 4.3.3 or above is installed on your system to run the script. You can download and install it from CRAN.

#### Running the Script

- 1. **Open Terminal or Command Prompt**: Depending on your operating system, open the terminal (Linux/macOS) or command prompt (Windows).
- 2. Navigate to the Project Directory: Use the cd command to change the directory to where the R script is located. For example: sh: cd path/to/xero\_ejin\_submission
- 3. Execute the Script: Use the Rscript command to run the recommender.R For example: sh:

  Rscript recommender.R
- 4. **Location of Predictions**: The tab-delimited file containing the predictions will be outputted to the **predictions** folder.

#### **Directory Structure**

- data/: Contains the input data required to run the model.
- predictions/: Contains the output of the model.
- recommender.R: Main script to produce predictions.
- methodology.html: Brief report explaining the methodology and reasoning behind the approach.
- model\_scoring.R: R script containing initial exploratory data analysis and testing candidate models. It is not required to run the main recommender.

## **Package Installation**

The following packages and their dependencies will be installed automatically if not already present:

dplyr: 1.0.9tidyr: 1.2.0

 $\bullet$  recommenderlab: 0.2-8

• here: 1.0.1

Please feel very free to reach out if you have any issues