Metabase Set up :

Below is the SQL query to use in Metabase :

|  |
| --- |
| WITH  LikedByUsers AS (  SELECT DISTINCT  blu.UserId  FROM  Bookslikedbyusers blu  JOIN books b ON blu.BookId = b.BookId  WHERE  b.BookTitle = {{filter}}  ),  RecommendedBooks AS (  SELECT  b.BookId,  b.BookTitle,  bhg.GenreId,  g.GenreName,  COUNT(r.RatingId) AS RatingsCount,  COUNT(DISTINCT r.UserId) AS GoodRatingsCount  FROM  ratings r  JOIN books b ON r.BookId = b.BookId  JOIN bookhasgenre bhg ON b.BookId = bhg.BookId  JOIN genre g ON bhg.GenreId = g.GenreId  WHERE  r.UserId IN (SELECT UserId FROM LikedByUsers)  AND b.BookTitle <> {{filter}}  GROUP BY  b.BookId,  b.BookTitle,  bhg.GenreId,  g.GenreName  ),  TopRecommendedBooks AS (  SELECT  rb.BookId,  rb.BookTitle,  rb.RatingsCount,  rb.GoodRatingsCount,  rb.GenreName,  CASE  WHEN {{input}} IS NULL OR {{input}} = '' THEN (rb.GoodRatingsCount \* rb.GoodRatingsCount) / rb.RatingsCount  WHEN rb.GenreName = {{input}} THEN ((rb.GoodRatingsCount \* rb.GoodRatingsCount) / rb.RatingsCount) \* 7  ELSE (rb.GoodRatingsCount \* rb.GoodRatingsCount) / rb.RatingsCount  END AS WeightedScore  FROM  RecommendedBooks rb  ORDER BY  WeightedScore DESC  LIMIT  50  )  SELECT \*  FROM (  SELECT  ROW\_NUMBER() OVER (ORDER BY trb.WeightedScore DESC) AS TopPicks,  trb.WeightedScore,  b.BookTitle,  GROUP\_CONCAT(a.AuthorName SEPARATOR ', ') AS Authors,  rb.GenreName,  p.PublisherName,  b.Price,  b.ISBN,  b.PublishedDate,  bm.ImageLink,  bm.BookDescription,  rb.GoodRatingsCount,  rb.RatingsCount  FROM  TopRecommendedBooks trb  JOIN books b ON trb.BookId = b.BookId  JOIN bookhasauthor bha ON b.BookId = bha.BookId  JOIN author a ON bha.AuthorId = a.AuthorId  JOIN publishers p ON b.PublisherId = p.PublisherId  JOIN booksmetadata bm ON b.BookId = bm.BookId  JOIN RecommendedBooks rb ON b.BookId = rb.BookId  GROUP BY  b.BookTitle,  trb.WeightedScore,  b.BookId,  rb.GenreName,  p.PublisherName,  b.Price,  b.ISBN,  b.PublishedDate,  bm.ImageLink,  bm.BookDescription,  rb.GoodRatingsCount,  rb.RatingsCount  ) subquery  ORDER BY TopPicks  LIMIT 10; |

On the right hand side of the screen, if you click on {x} you open the variables tab. You have two variables to set : “filter” and “input”

Une image contenant texte, logiciel, nombre, Icône d’ordinateur

Description générée automatiquement

For "Filter" :   
variable name = Filter, variable type = text, filter widget label = Enter the title of the book you like, How should users filter on this variable? = search box, default filter widget value = Carrie, Always require a value = Yes

Une image contenant texte, capture d’écran, Police, nombre

Description générée automatiquement

For "Input" :   
variable name = Input, variable type= text, filter widget label = Enter the genre of books you prefer, How should users filter on this variable? = input box, default filter widget value = NULL, Always require a value = Yes

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Description générée automatiquement

At this point I recommend to run the query with inputs “Carrie” and “History” so you can check everything works.

Then, on the bottom left hand side of the screen you have “visualization” which you should click on.

Une image contenant texte, logiciel, nombre, Icône d’ordinateur

Description générée automatiquement

Then you go on the line plot and you click on the cog wheel:

Une image contenant texte, capture d’écran, Système d’exploitation, logiciel

Description générée automatiquement

From there, under “Data” you should select “BookTitle” for the Y-axis and then “WeightedScore” and “GoodRatingsCount” for the X-axis:

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Description générée automatiquement

Under “Axes”, these are the options that should be selected:

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Description générée automatiquement

Une image contenant texte, capture d’écran, logiciel, nombre

Description générée automatiquement

If you closed the “Editor” to put the visualization in full screen, you should get the following result :

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Description générée automatiquement