Documentation for UniRank

Company Overview:
UniRank is a leading consulting firm specializing in university rankings. Our core service is to assist universities in enhancing their rankings by analyzing real-time data and trends in the educational landscape. We focus on providing detailed, accurate ranking data to empower stakeholders in making informed decisions.

Project Mission:
UniRank's current project aims to support stakeholders at the University of Maryland's (UMD) Smith School of Business. Our objectives include:
Empowering UMD Smith School Stakeholders: Providing stakeholders with detailed and accurate information on university rankings.
Developing a Comprehensive Database: Creating a state-of-the-art database that integrates diverse data from multiple years, offering a deep dive into historical trends and current standings.
Utilizing Comprehensive Data for Insights: Using the compiled ranking data to provide valuable insights to UMD stakeholders, helping them understand their position in the educational landscape.
Examining Evaluation Criteria: Analyzing how different data sources weigh and evaluate academic programs, focusing on criteria specific to business schools.
Strategizing for Improved Market Standing: Using data to analyze top competitors and strategize ways for the Smith School to improve its market standing and ranking.

Project Introduction
We have carefully selected data sources that are renowned for their comprehensive and real-time insights into university rankings. Our goal is to provide a comprehensive analysis of university rankings, focusing on various critical factors. The selection of reputable and authoritative data sources is crucial to the integrity and accuracy of our project.

Data Sources & References:
We have sourced our data from a variety of well-respected and renowned university ranking websites. These platforms are recognized for their detailed and current assessments of academic institutions worldwide. Our chosen sources, along with their reference links, are as follows:

Data Source	Reference Link
QS World University	https://www.topuniversities.com/
Edvoy	https://edvoy.com/articles/top-mis-universities-in-usa/
Poets&Quants	https://poetsandquants.com/category/mba/mba-rankings/
Fortune	https://fortune.com/education/business/best-mba-programs/
U.S. News & World Report	https://www.usnews.com/education
Financial Times	https://rankings.ft.com/rankings/history

Rationale Behind Source Selection:
The selection of these sources was driven by their comprehensive and dynamic approach to university evaluation. They provide a multifaceted view of academic institutions, covering a range of criteria that are vital for thorough and balanced analysis. These sources are updated regularly, ensuring our project reflects the latest trends and data in the field of higher education.

Ranking Criteria
The universities in our database are ranked based on a comprehensive set of criteria, which include:
- Academic Reputation
- Faculty-to-Student Ratio
- International Faculty
- Employer Reputation
- Alumni Salary
- Student Satisfaction
- Debt After Graduation
- Admissions Standards
- Academic Experience

- Career Outcomes
- Outcomes Score
- Brand Score
- Fortune 1000 Score
- Graduation Rate
- Financial Resources
- Return of Investment
- Career Progress
- Employment Rate
- Alumni Outcomes

Significance of Chosen Criteria:
Each criterion has been carefully chosen to reflect the various aspects that collectively determine the overall standing of an academic institution. This broad spectrum approach allows for a more nuanced and thorough analysis, providing insights into not just academic excellence but also post-graduation success, financial viability, and overall student experience.

Project Analysis and Application:
By integrating data from these diverse sources, our database system assembles a rich and detailed picture of the current academic landscape. This multifaceted analysis aids in identifying trends, strengths, and areas of improvement for universities, and it provides valuable insights for students, educators, and policy makers in making informed decisions.

Conclusion
The utilization of these data sources enriches our sophisticated database system we are developing for UMD, offering a robust and nuanced view of university rankings. This carefully curated data forms the foundation of our analysis, enabling us to provide insightful recommendations and observations.

How to test out project:

For finding the answer to our questions mentioned in the proposal we have created views with respect to each question. Below are the instructions on testing the project:

Step 1: Use the below statement to use the database for our project
USE BUDT702_Project_0501_07

Step 2: To see the results for the following questions execute the select queries mentioned below them
1.What are the UMD Smith School program rankings for the past three years?

*SELECT * FROM [UniRank.ViewProgramRankings]*
ORDER BY rankYear DESC, progId;

Output:

	progId	progName	progLocation	rankNumber	rankYear
1	PR01	Information Systems	College Park	8	2023
2	PR01	Information Systems	College Park	11	2023
3	PR02	Business Analytics	College Park	38	2023
4	PR03	Supply Chain Analytics	College Park	28	2023
5	PR04	Finance	College Park	NULL	2023
6	PR05	MBA	College Park	120	2023
7	PR01	Information Systems	College Park	8	2022
8	PR01	Information Systems	College Park	17	2022
9	PR02	Business Analytics	College Park	31	2022
10	PR03	Supply Chain Analytics	College Park	26	2022

2. Which data sources have been used to compile the program rankings?

*SELECT * FROM [UniRank.ViewRankSources]*

Output:

	rankSrcId	rankSrcName	rankSrcLink
1	R01	QS World University	https://www.topuniversities.com/
2	R02	Edvoy	https://edvoy.com/articles/top-mis-universities-in-usa/
3	R03	Poets&Quants	https://poetsandquants.com/category/mba/mba-rank...
4	R04	Fortune	https://fortune.com/education/business/best-mba-pr...
5	R05	U.S. News & World Report	https://www.usnews.com/education
6	R06	Financial Times	https://rankings.ft.com/rankings/history

3.What is the ranking trend for Information Systems over the years? Are they improving or declining?

SELECT * FROM [UniRank.ViewISBAUMDRank]
ORDER BY progName,rankYear DESC

Output:

	progName	rankNumber	rankYear	rankSrcName
1	Business Analytics	38	2023	QS World University
2	Business Analytics	31	2022	QS World University
3	Business Analytics	25	2021	QS World University
4	Business Analytics	NULL	2020	QS World University
5	Information Systems	11	2023	U.S. News & World Report
6	Information Systems	8	2023	Edvoy
7	Information Systems	17	2022	Edvoy
8	Information Systems	8	2022	U.S. News & World Report
9	Information Systems	10	2021	U.S. News & World Report
10	Information Systems	9	2020	U.S. News & World Report

4.Who are the top-ranking competitors for UMD in MBA course?

SELECT DISTINCT tc.uniName, tc.rankNumber, rs.rankSrcName
FROM [UniRank.TopCompetitorsMBA] tc
*   INNER JOIN [UniRank.RankSource] rs ON rs.rankSrcId =*
tc.rankSrcId

ORDER BY tc.rankNumber ASC

Output:

	uniName	rankNumber	rankSrcName
1	Harvard University	1	Fortune
2	Stanford University	1	QS World University
3	The University of Pennsylvania (Wharton School)	1	Poets&Quants
4	Harvard University	2	QS World University
5	Stanford University	2	Fortune
6	University of Chicago	2	Poets&Quants
7	University of Texas at Austin	2	Fortune
8	Stanford University	3	Poets&Quants
9	The University of Pennsylvania (Wharton School)	3	Fortune
10	Northwestern University (Kellogg School of Manage...	4	Poets&Quants

5.How do different data sources weigh and evaluate the programs? What criteria do they use?

*SELECT * FROM [UniRank.CriteriaView]*

Output:

	rankSrcName	rankCriteria
1	Edvoy	Alumni Salary
2	Edvoy	Debt After Graduation
3	Edvoy	Student Satisfaction
4	Financial Times	Alumni Outcomes
5	Financial Times	Career Progress
6	Financial Times	Employment Rate
7	Financial Times	Return of Investment
8	Fortune	Brand Score
9	Fortune	Fortune 1000 Score
10	Fortune	Outcomes Score