Project Synopsis for Wedding Crunchers:

**Project Title:** Wedding Crunchers

**Synopsis:**

*Wedding Crunchers* is a comprehensive data analytics project focused on extracting valuable insights from wedding data to understand trends and patterns in the wedding industry. The project involves a deep dive into a dataset containing various wedding-related details, including dates, locations, guest sizes, and costs. This analysis aims to provide industry stakeholders—such as wedding planners, venues, and couples—with a data-driven approach to making informed decisions.

**Project Objectives:**

1. **Data Cleaning and Preprocessing:**  
   Prepare the dataset by handling missing values, filtering outliers, and ensuring consistency for smooth and accurate analysis.
2. **Temporal Data Analysis:**  
   Analyze temporal trends to uncover popular wedding months, seasons, and weekdays to help planners understand high-demand periods.
3. **Statistical Analysis of Trends:**  
   Use statistical methods to examine guest size variations, typical wedding budgets, and preferred locations. This will include calculating averages, medians, and identifying significant trends.
4. **Geographic Data Handling and Analysis:**  
   Employ geographic data handling to analyze the popularity of wedding destinations and create maps to display location-specific trends.
5. **Data Visualization and Presentation:**  
   Utilize data visualization tools like Matplotlib and Seaborn to present insights in a clear, visual format. These insights will be communicated via charts, graphs, and heat maps to make findings accessible and engaging.
6. **Interpretation of Data Insights:**  
   Draw actionable conclusions from data, making it easier for users to apply findings in practical scenarios like budget planning, location selection, and guest list management.

**Tools and Technologies:**

* **Programming Language:** Python
* **Development Environment:** python idle (alternatively, PyCharm, VSCode)
* **Libraries:**
  + *Pandas*: Data cleaning and manipulation
  + *Matplotlib and Seaborn*: Data visualization
  + *Geopandas*: Geographic data analysis

**End Goal:**  
To provide a visual and statistical summary of wedding trends, assisting industry professionals, couples, and analysts in understanding current wedding market dynamics. The insights gained will aid in planning, decision-making, and marketing strategies tailored to evolving wedding preferences.