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## **Project proposal**

This project is about the prediction of how much the player spends in online mobile games (Brutal Age) based on user data. The data for this case comes from the second Intelligent China Cup (ICC) data competition organized by DC. "Brutal Age" is a globally popular SLG type mobile game. According to App Annie statistics, "Brutal Age" ranks first on the game sales charts in 12 countries and in the top 10 in 82 countries. Therefore, understanding the value of each player is of great significance to the game's advertising strategy and efficient operations activities and helps provide players with a more personalized experience. In this project, we hope to estimate their value for players at the early stage of the game utilizing the behavior data of players in the first 7 days of the game to predict their total payment amount within 45 days.

Data source: Chengdu Nibiru Technology Co., Ltd. provided to DC officials for the data competition.

Data scale: millions of records.

Prediction type: regression.

Algorithms involved: linear regression, random forest, and GBDT.