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(57) Abstract :

Disclosed herein is a real-time digital financial assistance system (100), comprising a user device (102) collect real-time financial transaction information including transaction descriptions, timestamps and transaction amounts from a user through a user interface (104), a communication network (106) establish a communication link for data transmission, a processing unit (108) process real-time transaction data, further comprises a data input module (110) receive real-time information, a pre-processing module (112) clean, normalize and reduce noise, a feature extraction module (114) extract temporal and statistical features from pre-processed data, a transaction categorization module (116) process extracted features and classify each transaction into expense categories, an expenses prediction module (124) predict future expenses on the basis of categorised transaction, a financial analytics module (126) aggregate categorized transactions and predicted expenses to generate financial insights, trends and summaries, an output module (138) transmit categorized transaction, predicted expenses and financial analytics to the user device (102).

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