Our group ultimately decide to utilize Data flow diagram (DFD) and CRUD table to describe the system architecture of CCSS and provide corresponding data field requirements. The data flow diagram illustrates the flow and processing of data within CCSS, as well as the relationships between them. By visualizing the data sources, flow, and processing steps, the DFD helps in understanding the overall structure and functionality of the system. CRUD tables are employed to ensure data consistency and integrity in CCSS, while also establishing connections with its functions. CRUD stands for Create, Read, Update, and Delete, representing the operations performed on data. Through the CRUD table, the data operations associated with different functionalities are identified, along with their impact on the data.

DFD is shown in the figure below, which allows us to identify the individual components in the system, as well as their interactions and dependencies.

DFD图片

The CRUD matrix for the Customer Credit Score System (CCSS), outlined below, serves to verify the data consistency and integrity within the CCSS, as well as to delineate the interactions between data operations and system functionalities. Within this matrix, 'C' signifies the creation of data, 'R' denotes data retrieval, 'U' indicates data modification, and 'D' represents data elimination. Each entry in the matrix corresponds to a specific action that a function executes upon a data repository.

CURD图片