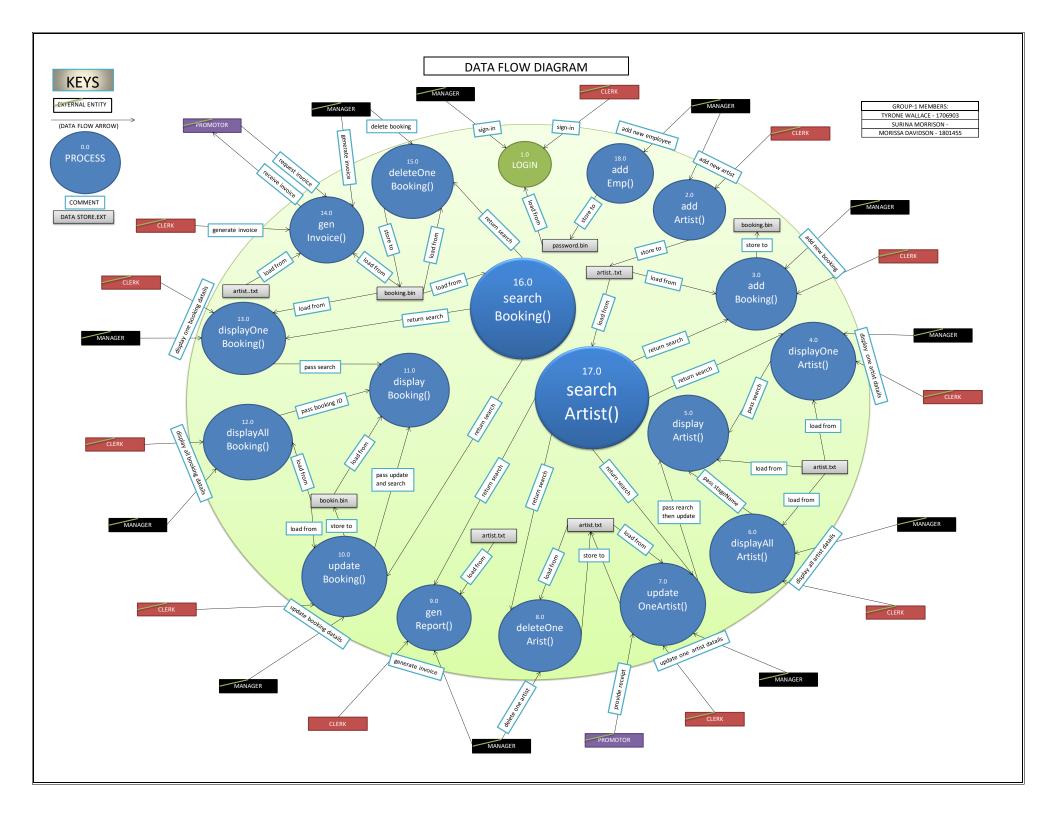
## Deliverable #1:

# Data Flow Diagram document

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## Deliverable #2:

Solution Components document

#### **SOLUTION COMPONENTS DOCUMENT:**

#### A. FUNCTIONS:

- Login();
  - Provides a menu for clerk or manager to access the system, by stating their authority or level of access.
  - \* Returns options chosen as integer.
- validateLogin();
  - Ask for login details.
  - ❖ Verify login details with data stored in password file (binary file).
- 3. menu();
  - ❖ Provide user of system with a menu equivalent to the access level being used
  - ❖ Allows navigation of system by stating the activities the user wishes to perform.
- addArtist();
  - Add artist details to system, details such as name, account number, telephone number and so on.
  - Additionally foundation details of artist can be provided as well.
- addBooking();
  - ❖ Add bookings details for artists to the system, details such as booked events, flight information and so on.
- displayOneArtist();
  - Calls the searchArtist() then pass the result if found, to be displayed to the screen through the call of the displayArtist().
- DisplayAllArtist();
  - Display all the artists within the system by running the displayArtist() through a for loop until all artist are displayed.

- 8. displayArtist();
  - Contains a series of prints statements to display all the details of the artist.
- updateOneArtist();
  - Calls searchArtist() to identify artist details user wishes to modify.
  - Modify artist details.
  - Call displayArtist to view changes made to artist details.
- deleteOneArtist();
  - Remove all details of a specific artists after calling the searhArtist().
  - Controls by managerial access only.
- 11. genReport();
  - Generate a report of an artist with foundation details.
- updateBooking();
  - \* Calls searchBooking() to identify booking details user wishes to modify.
  - Modify booking for one artist.
  - Call displayBooking() to view changes made to booking details.
- 13. displayBooking();
  - Contains a series of prints statements to display all the booking details of an artist.
- 14. displayAllBooking();
  - Display all the artists booking detail within the system by running the function displayBooking() through a for loop until all bookings are displayed.

## 15. displayOneBooking();

Calls the searchBooking() then pass the result if found, to be displayed to the screen through the call of the displayBooking().

## 16. genInvoice();

Generate an invoice for the promoter.

### 17. deleteOneBooking();

- ❖ Delete one booking detail of a particular artist within the system
- Controls by managerial access only.

## 18. searchArtist();

Searches the details of the artist in the artist file (sequential file).

## 19. searchBooking();

Searches the details of the booking in the booking file (binary file).

## 20. addEmp();

- ❖ Add new employee to the system.
- Controls by managerial access only.

#### **B. STRUCTURES**

- 1. login-
  - \* Retains login details such as identification number, username and password for access to system.
- 2. manager-
  - ❖ Nested in **union** player
  - Holds manager details
- 3. clerk-
  - ❖ Nested in **union** player
  - Holds clerk details
- 4. artist-
  - ❖ Holds artist detail and foundation in temporary storage.
- 5. booking-
  - Holds booking details for artists in temporary storage.
  - Contains structures such as b\_address and flight.
- 6. flight-
  - ❖ Hold structured information about the flight of the artist's booking.
  - ❖ Nested in booking structure.
- 7. b address
  - Nested in booking to store address of booked event
- 8. foundation
  - ❖ Holds structured details about artist's foundation, such a name of major current charity, balance and account number.
  - Nested in artist structure.

#### C. FILES:

- 1. artist.txt sequential file
  - Storage of artist details
  - Storage of artist foundation information
- 2. password.bin binary file
  - Storage of booking details
  - ❖ A binary file is used because the file will contain a lot of information and most of it is sensitive information
- 3. booking.bin binary file
  - **Storage for passwords, usernames and identification numbers for system.**
  - Contains very sensitive information for system access.

#### D. UNION

- 1. player-
  - Contains the structure both of manage and clerk.
- 2. rate\_per\_show-
  - Contains local rate and foreign rate as float variables, which is determined by type of booking, that is, overseas or local.
  - ❖ Nested in **struct** booking

#### E. ENUMERATOR

- 1. level-
  - ❖ Contains access level of user either in may be manager or clerk.
  - typedef enum {MANAGER = 1, CLERK} level;