

Information Systems III (301 & 302)

2020

SYSTEMS DEVELOPMENT PROJECT

Module Name **SYSTEMS DEVELOPMENT PROJECT**

Project Name **HAMBA KAHLE TRANSPORT SYSTEM**

Document Description **NARRATIVE OVERVIEW**

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Hamba Kahle was founded in 2019 to provide a service to transport individuals or small groups of passengers (clients) to their own selective destinations. The client can book a service for a single point to point travel, or for several days or weeks of travelling around the whole of South Africa. Hamba Kahle does not book the tours or any accommodation for their clients, they merely drive them. They are also not tour guides, but will have a good idea of the country and the better routes which they can recommend.

Hamba Kahle has depots in over 200 cities and towns in South Africa, where they keep their vehicles and have rooms at their depots for the drivers to sleep if they are on an overnight trip or longer. The depots are different sizes and have different facilities. The depots each have an admin office, a communal kitchen for self-catering for the staff, and parking for the vehicles and trailers. It is not necessary to record the number of parking bays. Right now, these are big enough and have not created any issues. The only information needed to be kept about the depot include the Depot Name, Street Number, Street Name, Town, Contact Number and Contact Person running the depot and number of beds available for drivers to sleep over.

Clients can make a booking with Hamba Kahle, which can consist of one or more Day Trips. Each Booking will have a Start date and an End date, and number of passengers in the group to be transported. When a client makes a booking, the administrator will have to check on the system whether the client already exists and whether the details are correct, and if not, the New Client details will need to be added. The Client information required is Client ID, Name (Surname and First Name), Contact Number and Email Address. Each client can make more than one booking. Then the administrator will need to assign a driver and a vehicle to the Booking details. The driver and the vehicle will be used throughout the entire booking for each of the day trips.

Each Day Trip will have a Trip Number, Date, Start Depot ID, Destination Depot ID and a Bed Request for the specific Depot near the destination for the day trip. A Trip record the details for 1 day's

travel. Each Depot can have multiple day trips coming and going; but each trip is associated with 2 depots - departure and destination.

Each day trip, however only belongs to one booking. The END OF DAY depot needs to confirm whether there is a bed available, and the number of available beds in the DEPOT will have to be updated. Once the driver leaves, the bed at the depot will become available again and will have to be adjusted. Hamba Kahle owns a fleet of vehicles ranging from small cars for one or two passengers up to vehicles that can seat 15 passengers. They also have trailers that can be hired with the vehicles. A booking can require one or more vehicles. Depending on the distance of the day trips, a vehicle can be used for more than one Booking.

Information about each vehicle, includes the registration number, date of purchase, make, model, year, number of passengers it can accommodate, and the type of drivers licence required to drive the vehicle. They do not need mileage, as vehicle maintenance will not be included in this version of the system. Information about Licences includes the Licence Code, Licence Description, and Licence Classification. A driver can have one or more licence codes and many Drivers can possess the same licence code. A Vehicle can only be classified under one licence code.

Driver information includes Driver ID, Name, Date of Birth, Contact Number, Date Employed, Home Town, and drivers Licence Code. Hamba Kahle would like a system which will help to manage the following:

- Vehicle details
- Driver Information
- Depot Details
- Client Information
- Booking Information
- Day Trip Details
- Manage driver's licences

Hamba Kahle intends to create a computer-based information system that will be able to perform the following tasks:

- Maintain Client Details and Manage the booking details including the Day Trips associated with each booking.
- Maintain Vehicle details
- Manage employee details
- Maintain depot details, updating the number of rooms available
- The managers would like to have reports on their vehicles and their details
- HR would like to have reports on employees and where they are at any time
- The admin staff would like to be able to report the number of rooms available in depots at any one time
- The drivers should be able to book a room at any depot if there is a room available

- The admin staff should be able to access this information to ensure that the room is ready for occupation
- At this stage financial and vehicle maintenance details have not been requested.