

Appendix 1: Assignment cover sheet

Student ID: BIDA23-211

Student name: Junior Mosimanenkwe

Student email: bida23-211@thuto.bac.ac.bw

Cohort: May2024

Assignment title: CSE103 SYSTEM DEVELOPMENT

Date of submission: 15 May 2024

Programme of study: BUSINESS INTELLIGENCE
AND DATA ANALYTICS

Year of study: Year 1

1.Planning:

a) Technical feasibility:

This alludes to deciding whether the recommended framework can be executed with the innovative framework as of now input and whether it can be coordinated with other frameworks. Evaluating the mechanical reasonability of Select Lodgings involves:

- **Fundamental Equipment and Computer program:**

Evaluate if the equipment and program assets accessible presently are satisfactory to back the arranged framework. Look at compatibility with the framework and frameworks right now input.

- **Adaptability:**

Without any doubt, there won't be a recognisable drop in execution as the framework develops and requests more in the future.

- **Security:**

Survey the system's capacity to defend private data, foil unlawful get to, and fight off online assaults.

- **Integration:**

Decide if it'll be conceivable to coordinate the unused reservation framework with property administration, bookkeeping, and client relationship administration frameworks at lodgings.

- **Information Administration:**

Evaluate the system's capacity to handle the sum of information delivered by bookings, reservations, and client information.

b) Economic feasibility:

This strategy looks at whether putting the framework into put will be more useful fiscally than the costs of creating, actualizing, and keeping up it. Agreeing to Exclusive Lodgings, financial practicality involves:

- **Cost-Benefit Investigation:**

Compare the anticipated benefits, such as higher income, fetched investment funds, and upgraded operational proficiency, with the assessed costs of framework improvement, equipment and program obtainment, preparation, and proceeding support.

- **Return on Venture (ROI):**

To find out in case contributing within the reservation framework will be monetarily attainable, compute the expected ROI over a given time outline.

- **Elective Arrangements:**

Explore other alternatives and weigh the advantages and impediments of each to choose which is best for the lodging in terms of taking a toll.

c) Schedule feasibility:

This strategy decides in case the recommended framework can be made and put into operation within the apportioned sum of time. Plan practicality for Exclusive Lodgings incorporates:

- **Timeline for the venture:**

Make an exhaustive extended arrangement that incorporates critical dates, assignments, and checkpoints for the advancement, testing, sending, and preparing of the framework.

- **Asset Accessibility:**

Verify that the extension will be wrapped up within the apportioned sum of time by having all the specified workforce, information, and help on hand.

- **Hazard administration:**

To diminish delays and plan disturbances, recognize conceivable dangers and make moderation plans.

- **Conditions:**

Decide whether any outside components might influence the venture timetable, such as administrative clearances, seller conveyance timelines, or framework changes.

d) Operational Feasibility:

This strategy assesses in case the recommended framework will be able to fulfil the organization's operational prerequisites as well as whether conclusion clients will acknowledge and utilize it effectively. Operational viability for Luxurious Inns involves the taking after:

- **Client Necessities:**

To guarantee that the framework fulfils the wants and desires of key stakeholders, such as department supervisors, workers, and administration, assemble necessities from them.

- **Client Preparing:**

Make a thorough training program to ensure that workers are legitimately instructed to function in the modern reservation framework.

- **Alter Administration:**

Put strategies into put to bargain with resistance to alter and make beyond any doubt the switch to the unused framework easily.

- **Client adequacy Testing:**

Confirm that the framework fulfils client needs and performs as anticipated in a genuine setting by conducting client adequacy testing.

- **Post-Implementation Back:**

Make methods for proceeding support and back to bargain with any issues that seem to happen after the framework is put into utilisation.

2. Analysis:

a) Select Lodging Request for Proposal (RFP):

Request for Proposal (RFP) Extend Title:

Making a Web-Based Deluxe Hotel Reservation Framework

To begin with, of all, Select Lodgings, one of Botswana's best lodging foundations, is trying to find offers from cable providers to form a web reservation framework. The system's destinations are to extend operational effectiveness, move forward client experience, and automate the booking and reservation methods.

Work Scope:

The chosen seller will be in charge of the taking after:

- Making and planning a natural web-based reservation framework that complies with Select Hotels' one-of-a-kind needs.
- Connecting the reservation framework to the databases and frameworks as of now input at the lodging.
- Putting in programmed cancellation highlights, instalment channels, and estimating calculations.
- Advertising specialized help and preparing to inform representatives concerning framework upkeep and utilization.

Prerequisites:

The proposed remedy must follow the taking after determinations:

- Help with online reservations and reservation organization.
- Up-to-date estimating and room accessibility information.
- Secure get to control and client verification.
- Installment door integration for smooth exchanges.

- Bookings that are not paid for are consequently cancelled.
- Capabilities for customized analytics and detailing.

Submission of offers:

[Embed due date] is the due date by which interested providers must yield their offers. The following should be included in the recommendations:

- The company's outline and relevant background.
- An outline of the recommended arrangement, counting the innovation and system architecture.
- The project's plan and destinations.
- An assessed fetched that accounts for support, establishment, and license expenses.
- Attestations from previous clients.

Assessment Measures:

The taking after benchmarks will be connected with evaluating recommendations:

- Specialized know-how and foundation.
- Compliance with the objectives and determinations of the venture.
- Economy and esteem for the money.
- The recommended timetable for delivery and timeline.
- The calibre of the client involvement and recommended cure.

Request and proposition entries ought to be sent to [Embed Contact Individual]. [Enter Contact Points of interest]

b) Fundamental and Non-Necessary Highlights:

Functional requirements:

• Online Booking:

Through the inn site, visitors ought to be able to form reservations for rooms online.

• Real-Time Availability:

The framework ought to give the current price and room accessibility.

• Payment Integration:

Enabling secure and smooth exchanges through integration with payment gateways.

• Independent Cancellation:

Reservations that stay unpaid for three days need to be consequently cancelled.

- **Client Confirmation:**

To get to the framework, registered users must safely log in.

- **Detailing:**

Create individualized reports on income, inhabitation rates, and reservation data.

Non-functional requirements:

- **Security:**

The framework must guarantee the protection, accessibility, and astuteness of data.

- **Convenience:**

Both visitors and lodging representatives ought to discover it straightforward and clear to utilize the client interface.

- **Performance:**

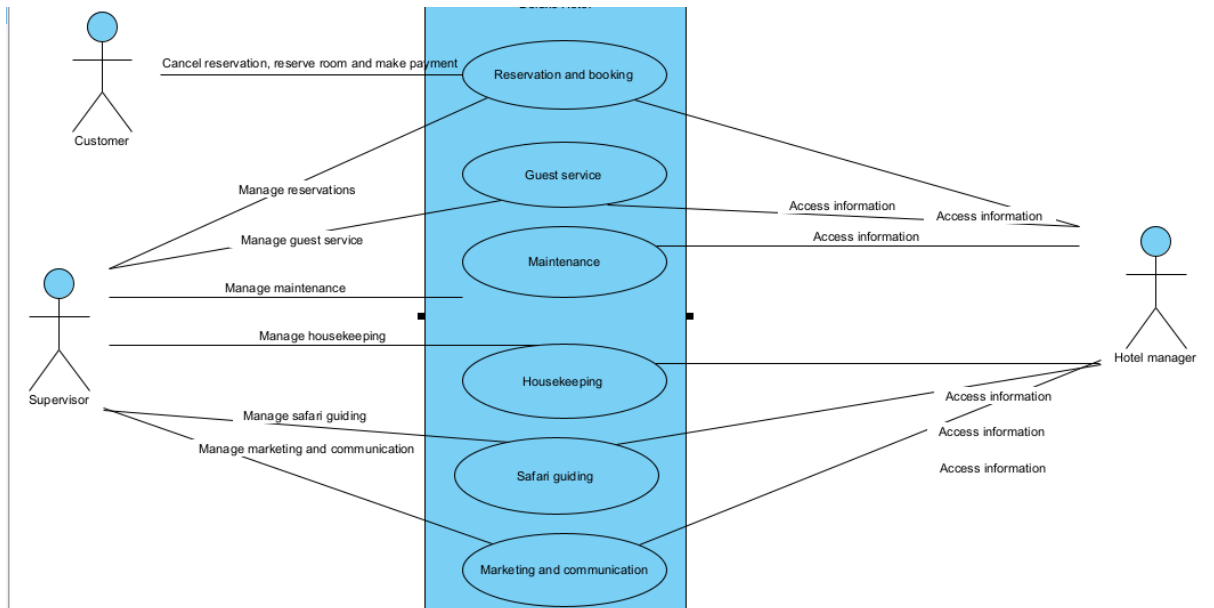
There ought to be no slack when dealing with a few clients at once, and the framework ought to be fast to reply.

- **Adaptability:**

In arrange to handle future development and rising requests, the framework must be versatile.

3. Design:

- a) Utilize Cases for Select Lodgings within the Utilitarian Demonstrate Circumstance:



i. Save a Situate:

- **Description:**

Empower shoppers to form reservations online or through reservation staff.

- **Performing artists:**

Client, Reservation, and Booking Staff. Moreover, representatives may make bookings for clients' sake.

ii. Cancel Booking:

- **Players:**

Client, Reservation, and Planning Workforce

- **Abstract:**

Encourages online or staff-assisted reservation cancellations for clients. Workers may moreover cancel reservations for clients' sake.

iii. Control Room Openness:

- **Depiction:**

Empower staff to overhaul room accessibility based on reservations and cancellations to ensure adjusted accessibility data for clients.

- **On-screen characters:**

Reservation and Booking Staff.

iv. Installment Preparing:

- **Portrayal:**

Empowers instalment preparing for affirmed bookings, either online by clients or physically by staff.

- **Performing artists:**

Client, Reservation, and Booking Staff.

v. Deliver Reports:

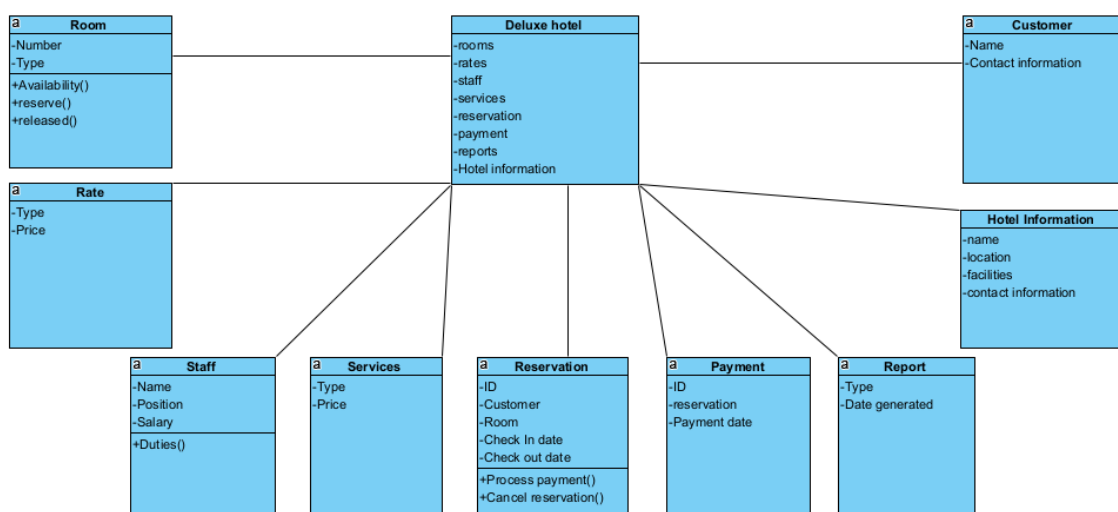
- **Portrayal:**

Empower administration and staff to create reports on reservation information, inhabittance rates, wages, and other critical measurements.

- **On-screen characters:**

Administration, Reservation, and Booking Staff.

b) Class diagram based on the Situation:



- **Customer:**

Stands for those who book bookings.

- **Reservation:**

Demonstrates each special reservation that a customer has made.

- **Room:**

Stands for the numerous sorts of rooms that can be saved.

- **Staff:**

Stands in for staff individuals who handle bookings and reservations.

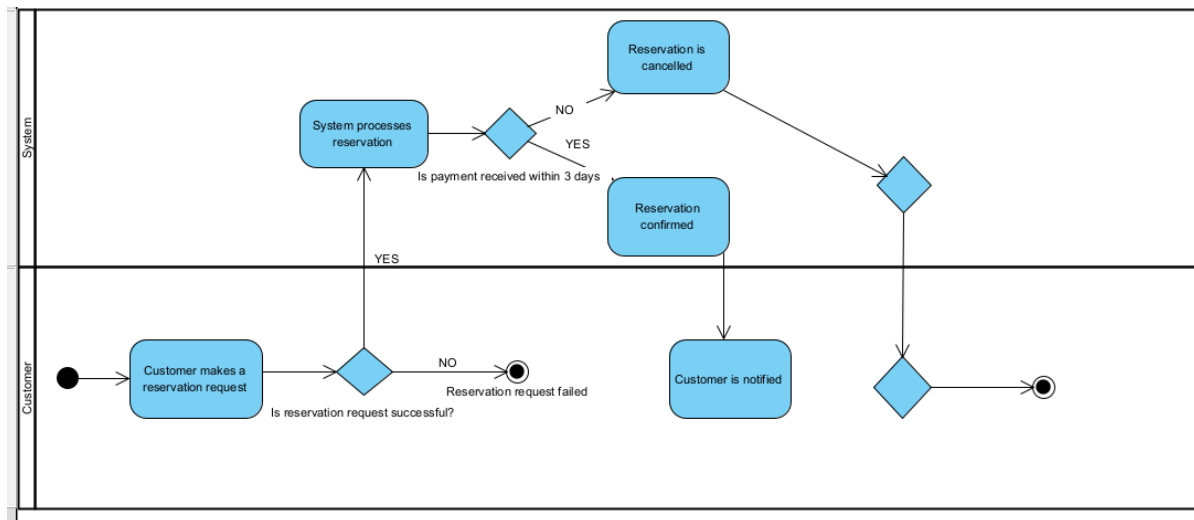
- **Installment:**

Appears the instalment points of interest are related to bookings.

- **Report:**

Appears delivered reports on measurements and reservation data.

c) Behavioral Demonstrate:Activity diagram



Select Lodgings Situation Action Chart:

- **Begin:**

Gets the reservation strategy begun.

- **Make a Reservation:**

The client chooses the dates and kind of settlement.

- **Check Accessibility:**

The framework looks for the accessibility of rooms on the chosen dates.

- **Confirm Reservation:**

The client confirms the reservation and gives the instalment data.

- **Installment Handling:**

The framework approves the reservation and handles the instalment.

- **End:**

The reservation method is wrapped up.

d) Sequence diagram:

Luxurious Lodgings Situation Arrangement Graph:

- **Client:**

Choose the dates and kind of settlement to begin the reservation handle.

- **Framework:**

Confirms reservation information and accessibility of rooms.

- **Client:**

Gives installment data.

- **Framework:**

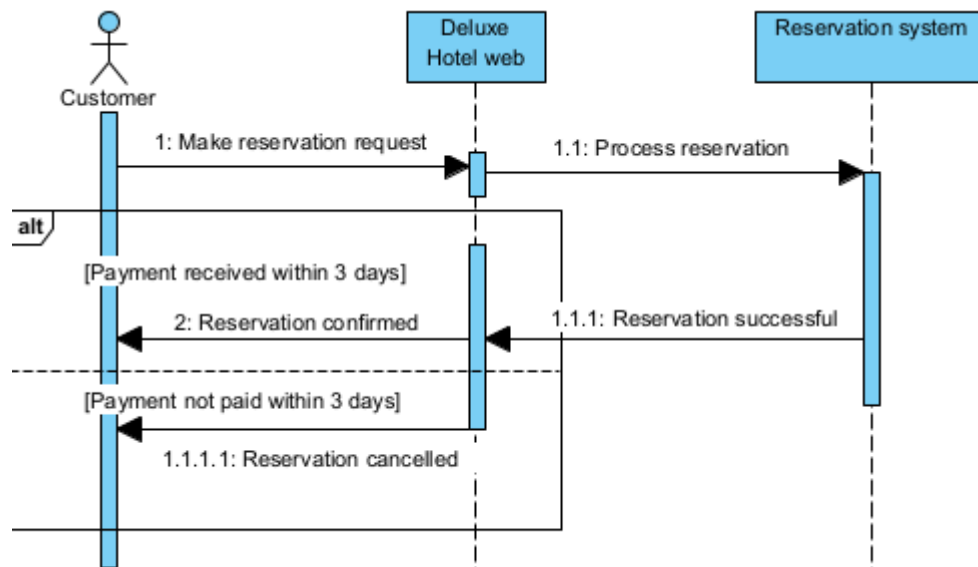
Confirms reservations and forms instalments.

- **Reservation Staff:**

Revives the framework with the status of reservations.

- **Client:**

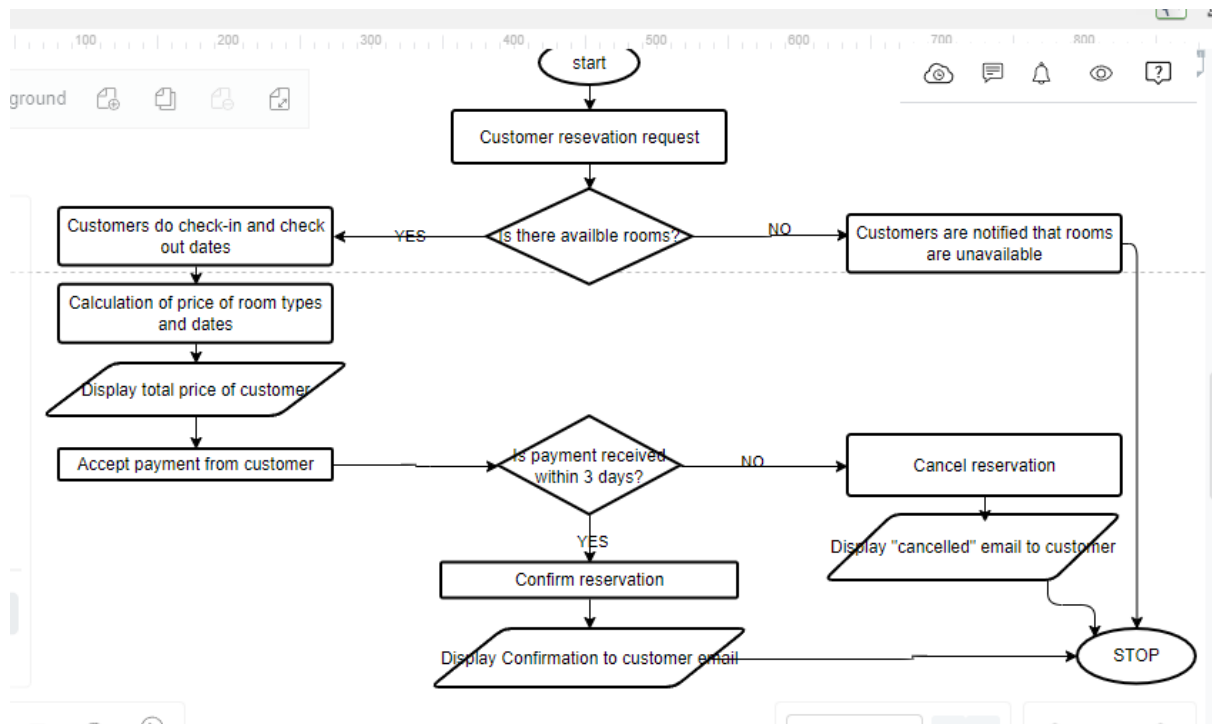
Gets reservation affirmation.



4. Execution:

a) Nitty gritty Rationale Flowchart for Reservations and Bookings:

Depiction of a Flowchart:



i. Begin:

- The strategy gets begun.

ii. Determination of Clients:

- The client chooses the favoured room sort and dates.

iii. Check Accessibility:

The framework decides in case the chosen room sort is accessible for the chosen dates.

- The strategy moves on to the taking after arranging in case the room is accessible.
- The shopper is educated and the procedure concludes in case the settlement isn't accessible.

IV. Confirm Your Reservation:

- The reservation is affirmed by the client.
- The client must affirm sometime recently moving on to the next stage of the method.
- Ought to the client choose to cancel, the reservation isn't made and the strategy concludes.

v. Provide Installment Data:

- The client gives installment data.

- On the off chance that the instalment data is submitted, the method progresses to the following stage.
- The method terminates and the reservation isn't made if instalment data isn't submitted.

vi. Installment Handling:

The instalment is taken care of by the framework.

- The reservation is confirmed once the instalment is acknowledged.
- The customer is educated and the reservation isn't made if the installment comes up short.

vii. Upgrade Reservation Status:

- The framework overhauls the reservation status.
- The strategy concludes on the off chance that the status is accurately changed.
- The method ends and the client is educated if there's a botch when changing the status.

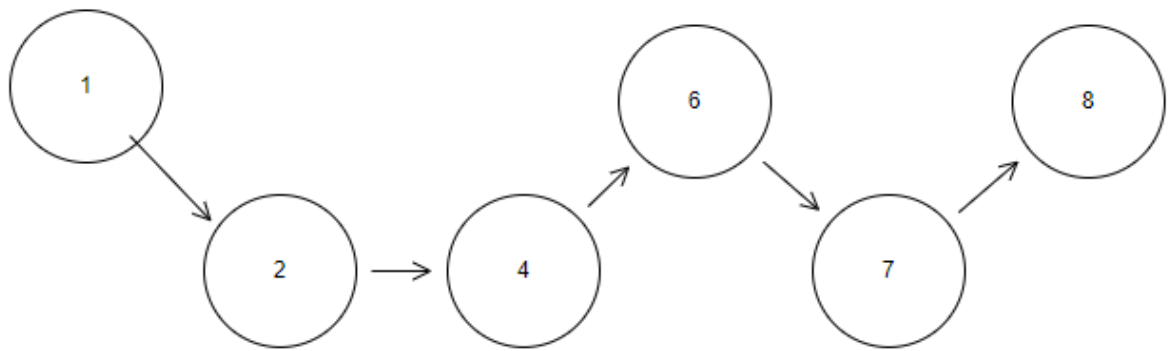
viii. Conclusion:

- The strategy is over.

5. a) Calculation of EF and LF:

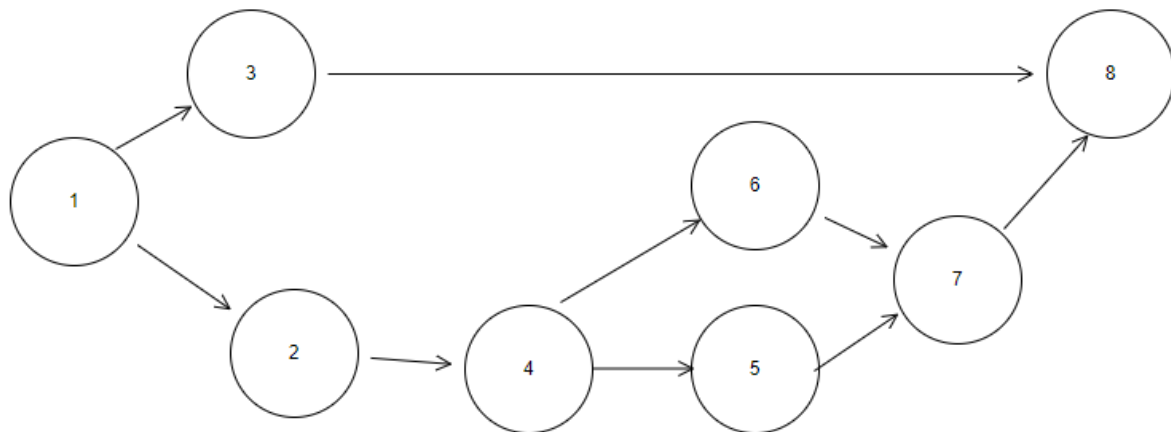
Id	Task	Dependency	Expected Time	Earliest Finish Time (EF)	Latest Finish Time(LF)	Critical Activity
1	Requirements	-	10	10	10	Yes
2	Analysis	1	8	18	18	Yes
3	Documentation	1	15	25	44	No
4	Logical Design	2	6	24	24	Yes
5	Report Design	4	4	28	29	No
6	Form Design	4	5	29	29	Yes
7	Implemtation	5,6	15	44	44	Yes
8	Installation	3,7	3	47	47	Yes

b) Critical path



Critical Path: Requirements -> Analysis -> Logical Design -> Form Design -> Implementation -> Installation

c)Network diagram:



Each assignment is spoken to by a hub within the organised chart.

- Assignment conditions are spoken to by bolts.
- The related hub shows the length of each work.

Along the basic course, basic assignments are demonstrated.