Payel
213208

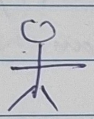
Experiment 6:-

Aim:- Identify scenarios develop use case diagram for the project (Smart Draw, Lucid chart).

1. What is use-case, why we draw it?

→ A use case diag. is a visual representation used in S/W engg. to illustrate how different actors interact with a system and its various func. It helps stakeholders understand system behaviour requirements & user interactions. aiding in clear communication, design & analysis of complex systems.

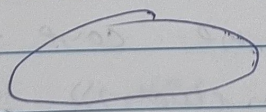
2. Elements of use case with example.

(a) Actor 

→ An actor represents the user of system including human users & other systems.

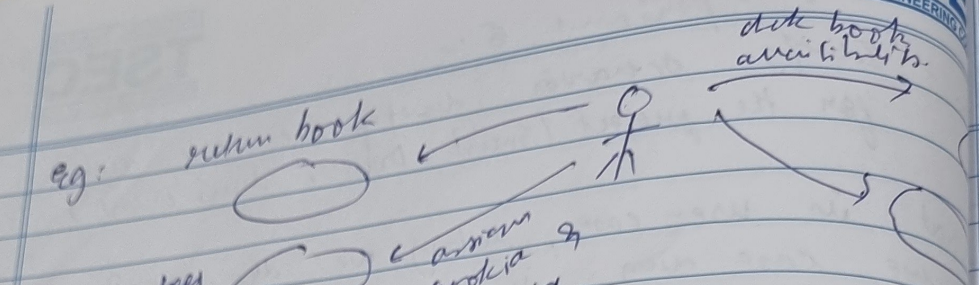
→ Three types
- i) users of system.
- ii) external application system.
- iii) External devices.

(b) usecase name of usecase.



→ use case represents the functionality provided by the system.

→ A use case represents a dialog between an actor & system.



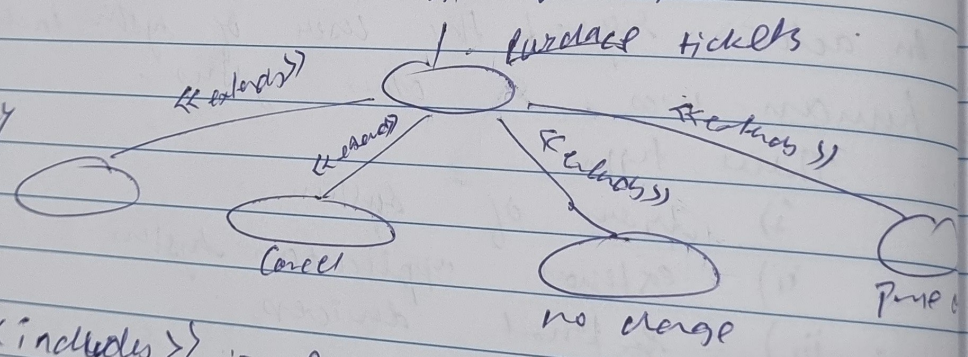
(3) Relationship in usecase with example.

→ i) <<extends>> :- This relationship models exceptional or seldom invoked

⇒ the exceptional event flows are factored of the main event flow.

⇒ Use case representing exceptional flows able to extend more than one use

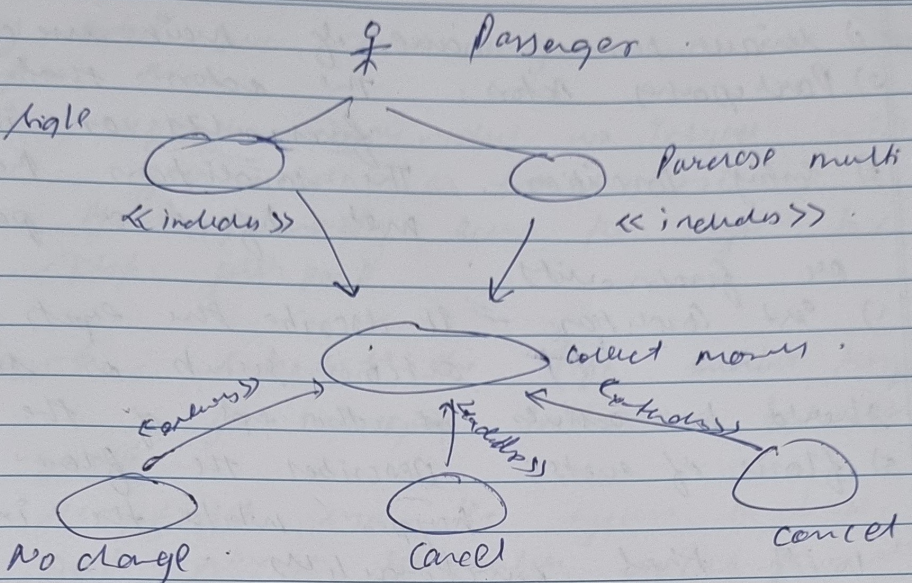
eg:



ii) <<includes>> :- Relationship represents common functionality needed in more one use case.

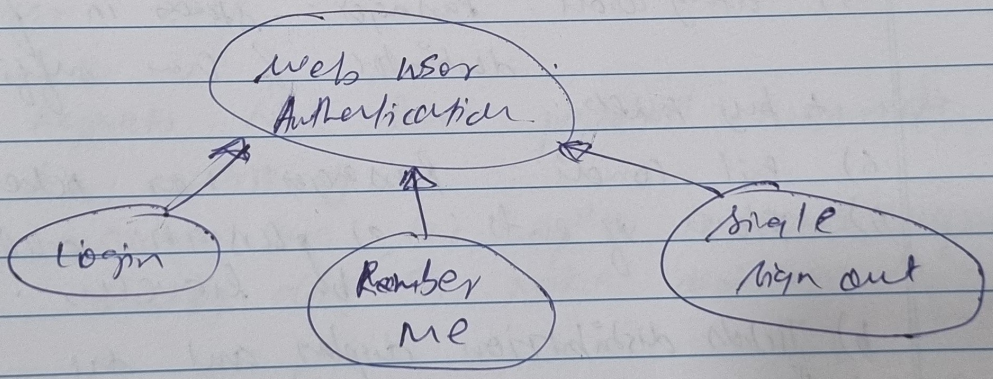
• The direction of a <<includes>> relationship is moving use cases (unlike the direction of the <<extends>> relationship):

Eg:



iii) Generalization :- its between use cases is similar to generalization bet^n classes child usecase inherits properties & behaviour of the parents use case & may override the behaviour of parents.

Eg:



(5) Six point doc. with eg.

→ The 6 point doc is the doc of the use-case diag. It represents the use-case diag. in text based descp. It contains of following 6 point.

1) Use case name: name of main use case
2) Participating actor: the actor that u
3) Entry condition: The conditions that
functionality or indu
met before a parti
or functionality.
4) Exit condition: - It describe the expects or
actions event or state
should be actives at the end of the pro
5) flow of events: Describes the flow of
happen while the interac
with that functionality.
6) Special requirements: Any special requirem
that need to be

eg: 1) Name: Purchase Ticket.
2) Participating Actor: Passenger.
3) Entry condi: Passenger stands in front of
destination & has sufficient
to buy tickets.
4) Exit condi: Passenger has ticket.
5) Flow of events: a) Passenger selects no of
be travelled.
b) Tickets distribution display and are.
c) Passenger inserts money, at least the amount
d) Ticket distributor returns change.
e) Ticket distributor issues ticket.
6) Special requirements: None.

6) How many actors are there in your use case name & explain them.

→ i) Guest: represent individual who interact with your system as external users.

Role: Guest primarily access the system for specific purpose.

ii) Receptionist :- Embodies the staff member responsible for managing interactions between system and guest.

Role :- receptionist use the system to check in guest manage reservation, process payments & add guest inquiries or issues.

iii) Staff: includes various employees within your org. such as housekeeping, maintenance & restaurant staff.

Role: Member utilize system for diff. purpose depending on their role.

iv) Manager: Represents high level personnel responsible for overseeing.

Role :- manager use the system to access reports analyze data & make decisions to improve.

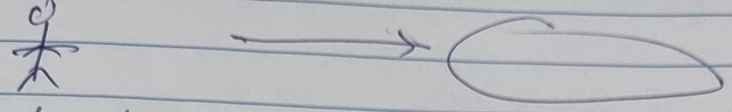
7) List & explain the usecases of your diag.

i) Reservation Management: allows guest to book rooms online or through receptionist.

ii) Check in and check out: Guest can check in & out of
seamlessly. The system handles
iii) Room allocation: This use case ensures
rooms are allocated based
guest preferences & availability. It may also
special requests such as connecting rooms
iv) Billing & Payment: The system calculates &
bills for guests including
room charges, addl. services & taxes.
v) Inventory management: This use case helps
hotel inventory including
type availability & pricing.
vi) Housekeeping & Maintenance: Use the system to
room status & request
vii) Guest service & requests: Can make service
through system & hotel
viii) Reporting & Analytics: Managers & admin
access various
ix) Employee management: System manages emp.
schedules & access
x) Security & Access control: The system ensures
security of guest
manage access rights for staff, monitors &
maintains guest privacy.
xi) Guest feedback & service: The system may
feedback from guests
enabling the hotel to gather valuable insights
improve guest.

THADOMAL SHAHANI TSEC ENGINEERING COLLEGE

(5) 6 point plan. for any 2 inp. fuctionality & diag.



(1) name :- check in / out.
(2) Participating actor : Guest.
(3) Entry condi : ⇒ Logs in with valid in & out password visit the hotel.
→ Guest check the room availability.
(4) Exit Condi : → Guest is allow with a room
→ payment is made on check in date.
(5) Flow of events : → Guest login to system / visits
→ check the room avail. by the receptionist.
⇒ room details & amount
→ Guest selects appropriate room, is allocate the room & check in / out & accordingly due payment

(6) Special Requirement : None.