Travel Companion

SOFTWARE ENGINEERING PROJECT

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SRS DOCUMENT:

1. FUNCTIONAL REQUIREMENTS

1.1) Create Trip

When an authenticated user logs in from their account or when a person signs up they get an option to create a new trip .The user has to select:

- the vehicle type
- the number of passengers for the journey
- the date of the journey
- the source
- the destination.

This function is initiated after login/signup after the user selects the create trip option from the user window.

The user that creates a new trip becomes the trip admin for the trip.

1.2) Request for join

When the user logs in , he/she is directed to the user window wherein if he chooses the option for ‘request for join’ , he gets a detailed view of the existing cabs for the trips that other users have already created.

1.2.1-The user can then send a request to join an existing trip to the trip admin.

1.2.2-The user can sort the search for the existing cabs by the source, destination or the date of travel.

1.2.3-Request Response-The user window initiates another function i.e. the request response which has two primary sub-requirements:

1.2.3a-For a trip that the user acts as an admin, the user can accept or decline the requests for other users based on their details.

1.2.3b-For a trip that the user has requested , the status (accepted/pending/declined) can be viewed by the user.

1.3)Contact sharing

The users can view the contact details of the admin and vice-versa if the contact sharing option is enabled by the users for a certain trip or for everyone.

1.3.1Confirmation Message-The user gets notified if his cab is cab request gets confirmed .The confirmation is through email and sms to the email address and the contact number provided respectively.

1.4)Status of the cab

The users can see the location of the cab right now .This functional requirement tracks the gps of the cab.

1.5)Travel agency:

The users can choose from which travel agencies they want the car by analyzing the availability of cars and different rates.

2.NON-FUNCTIONAL REQUIREMENTS

2.1System should accept payments via payment methods that are reliable like paypal, wallets ,cards, vouchers etc.

2.2User during sign up , should be helped appropriately to fill in the mandatory fields in case of invalid input.

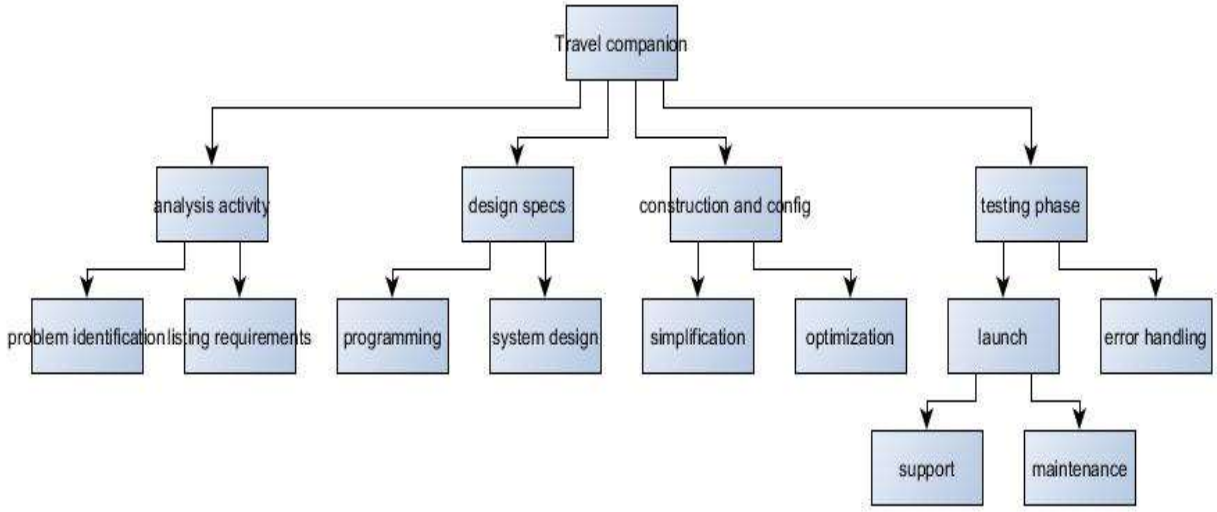
2.3 System should visually confirm as well as send booking confirmation to user's contacts .

PROCESS MODEL IDENTIFICATION:

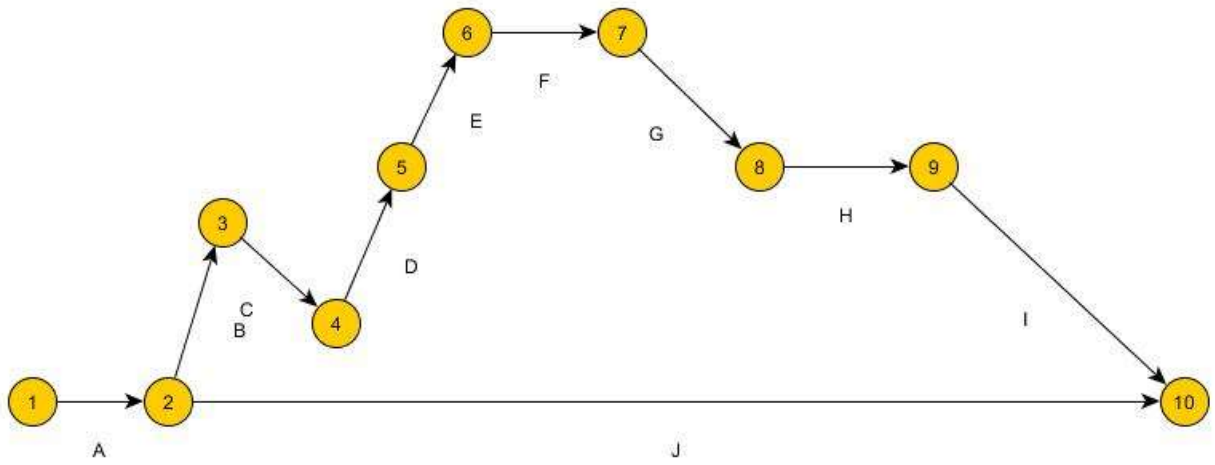
The model we are planning to use is **Sashimi** model(a variation of waterfall model).We are planning to use this traditional model because:

- The requirements are very well known
- The specifications are very well translated from the requirements
- It is a predictive model because we know the solution very well
- It is a waterfall model that shortens the development type by overlapping certain phases (since we have less time for development)

WBS(WORK BREAKDOWN STRUCTURE):

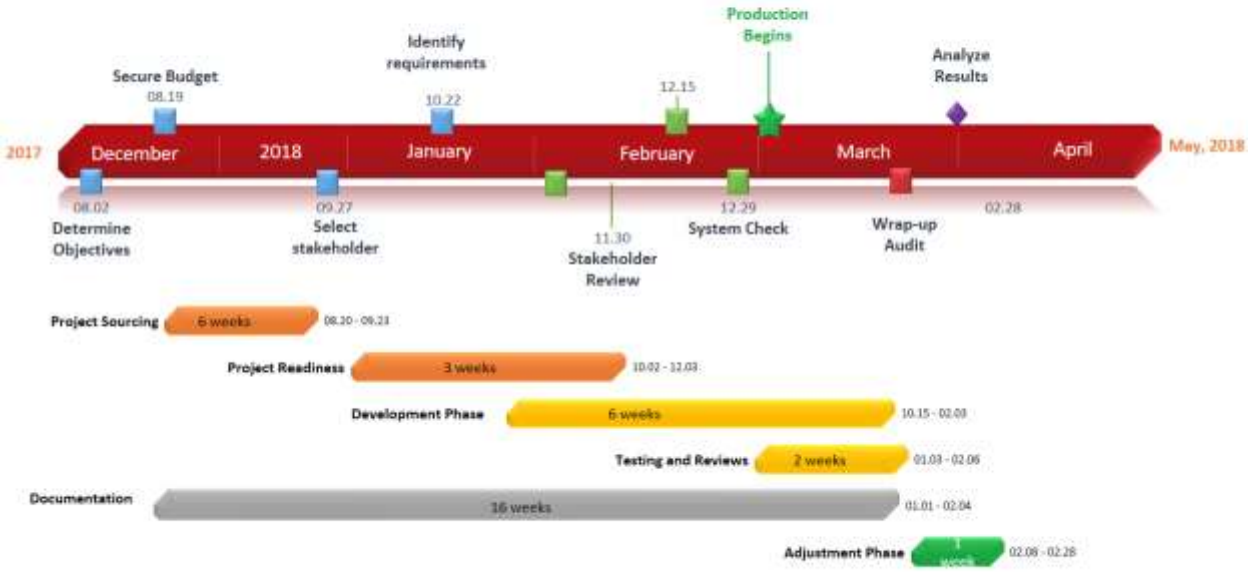


ACTIVITY NETWORK:

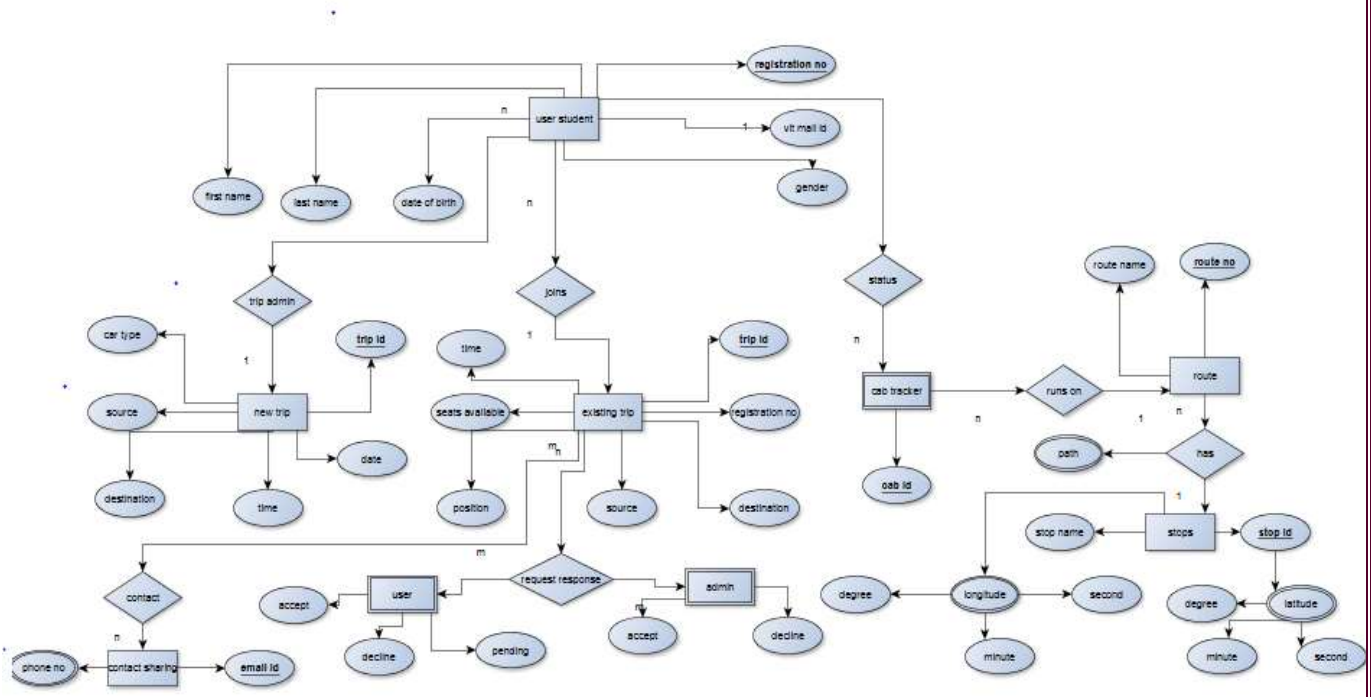


	ACTIVITY			DURATION
A	SET UP ACQUISITION TEAM			1 week
B	WRITE DOWN SOFTWARE REQUIREMENTS			3 weeks
C	DETERMINE OBJECTIVES			1 week
D	SECURE BUDGET			1 week
E	SELECT STACKHOLDER			1 week
F	STACKHOLDER REVIEW			1 week
G	SYSTEM CHECK			2 weeks
H	PRODUCTION			4 weeks
I	WRAP UP AUDIT			1 week
J	ANALYSE RESULTS			1 week

GANTT CHART:


Production Begins
Identify requirements
Secure Budget
08.19
10.22
12.15
Analyze Results
2017
December
2018
January
February
March
April
May, 2018
08.02
Determine Objectives
09.27
Select stakeholder
11.30
Stakeholder Review
12.29
System Check
Wrap-up Audit
02.28
Project Sourcing
6 weeks
08.20 - 09.23
Project Readiness
3 weeks
10.02 - 12.03
Development Phase
6 weeks
10.15 - 02.03
Testing and Reviews
2 weeks
01.03 - 02.06
Documentation
16 weeks
01.01 - 02.04
Adjustment Phase
02.08 - 02.28

E-R DIAGRAM:


registration no
user student
vit mail id
first name
last name
date of birth
gender
trip admin
joins
status
route name
route no
car type
trip id
time
trip id
cab tracker
runs on
route
source
new trip
seats available
existing trip
registration no
path
has
destination
time
date
position
source
destination
oab id
stop name
stops
stop id
contact
request response
admin
degree
longitude
second
degree
latitude
accept
user
decline
pending
accept
decline
minute
minute
second
phone no
contact sharing
email id

DATA DICTIONARY:

User name: Alphanumeric * input to be taken *

Password: Alphanumeric + Special characters * input to be taken *

Error: String * Error message to be displayed (preferably a pop-up) *

Source: String *Input – name of a city *

Destination: String * Input – name of the city Destination ≠ Source *

Vehicle type: String

Nop: Integer* Number of passengers to be entered *

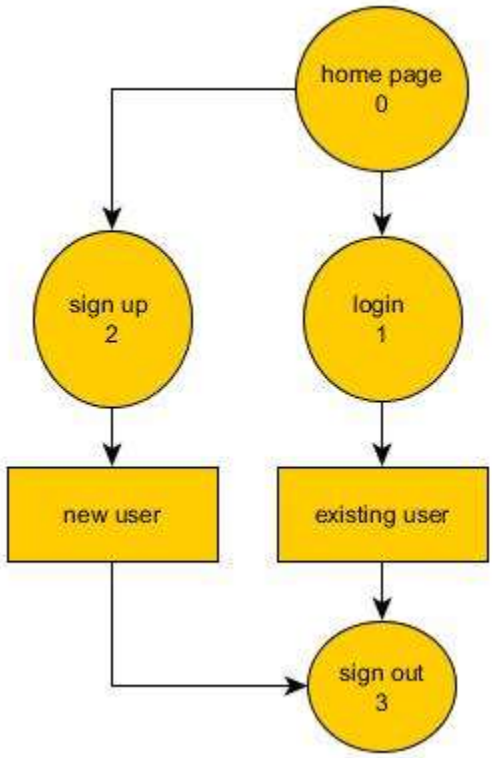
Doj: Date format * Date of journey *

Contact: Integer * Phone number of user *

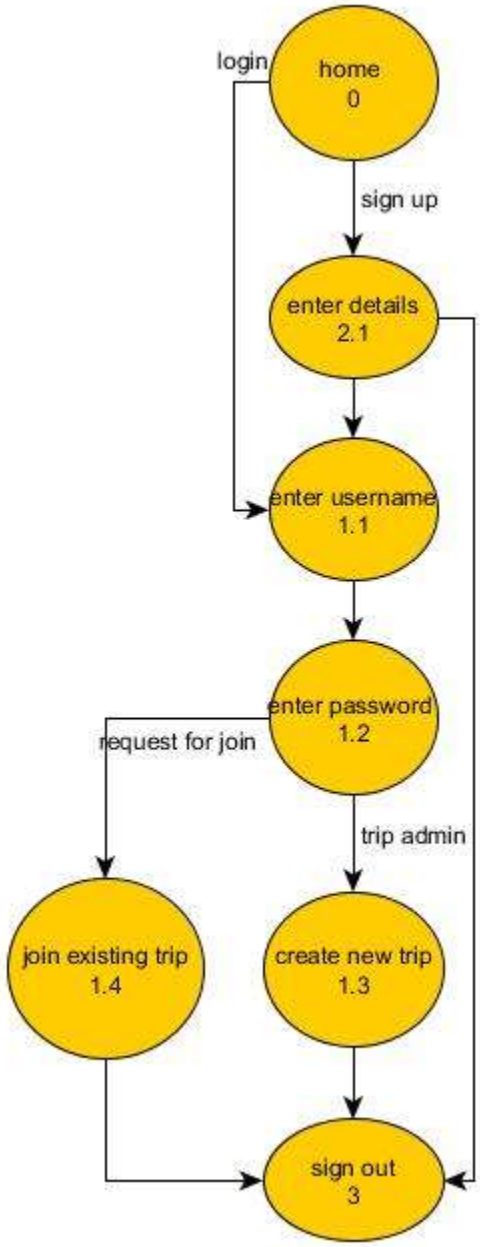
Email: Alphanumeric

DATA FLOW DIAGRAM:

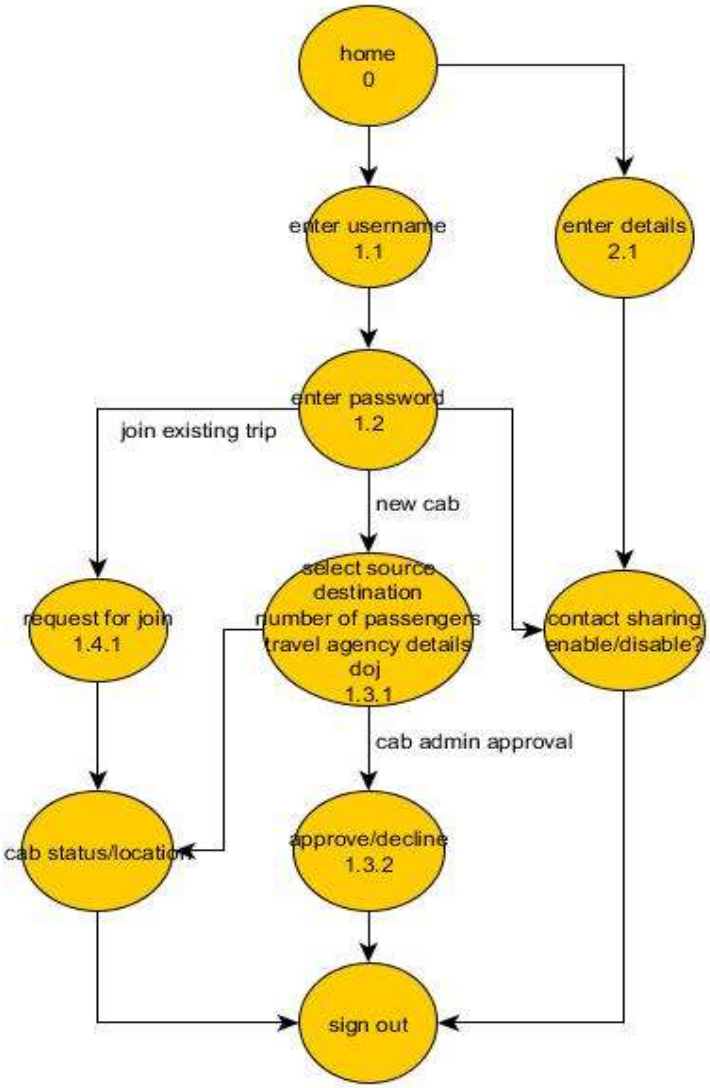
LEVEL0:



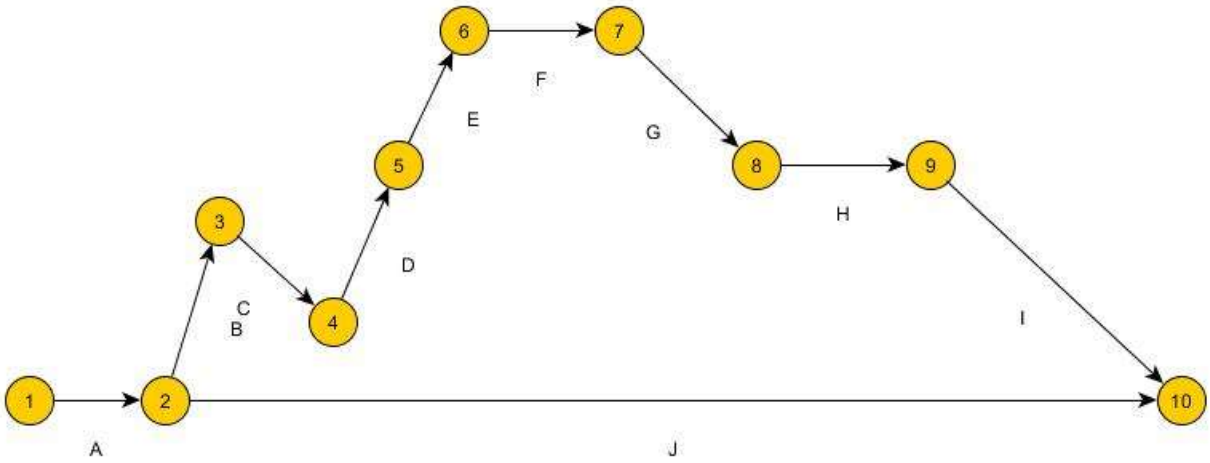
LEVEL1:


login
home
0
sign up
enter details
2.1
enter username
1.1
enter password
1.2
request for join
trip admin
join existing trip
1.4
create new trip
1.3
sign out
3

LEVEL2:


home
0
enter username
1.1
enter details
2.1
enter password
1.2
join existing trip
new cab
request for join
1.4.1
select source
destination
number of passengers
travel agency details
doj
1.3.1
contact sharing
enable/disable?
cab admin approval
cab status/location
approve/decline
1.3.2
sign out

CRITICAL PATH IDENTIFICATION:



Critical path tabulation:

	A	B	C	D	E	F
1	ACTIVITY	ES	EF	LS	LF	SLACK TIME LS-ES
2	A/1	0	1	0	1	0
3	B/3	1	4	1	4	0
4	C/1	4	5	4	5	0
5	D/1	5	6	5	6	0
6	E/1	6	7	6	7	0
7	F/1	7	8	7	8	0
8	G/2	8	10	8	10	0
9	H/4	10	14	10	14	0
10	I/1	14	15	14	15	0
11	J/1	15	16	15	16	0

Therefore critical path:A-B-C-D-E-F-G-H-I-J