

Any questions from last week?

3 questions
2 upvotes

SIT773 - SOFTWARE REQUIREMENTS ANALYSIS AND MODELLING

- Lecture 4: Identifying user requirements
- Dr Hourieh Khalajzadeh (Hannah)
- School of Information Technology
- hkhalajzadeh@deakin.edu.au



Outline

- Requirement Modelling
- User personas
- User stories
- Usage scenario

```

mirror_mod = modifier_ob.
    # Set mirror object to mirror
    mirror_mod.mirror_object =
    operation == "MIRROR_X":
        mirror_mod.use_x = True
        mirror_mod.use_y = False
        mirror_mod.use_z = False
    operation == "MIRROR_Y":
        mirror_mod.use_x = False
        mirror_mod.use_y = True
        mirror_mod.use_z = False
    operation == "MIRROR_Z":
        mirror_mod.use_x = False
        mirror_mod.use_y = False
        mirror_mod.use_z = True

```

```

#selection at the end -add
mirror_ob.select= 1
modifier_ob.select=1
context.scene.objects.active
("Selected" + str(modifier_ob.
mirror_ob.select = 0
= bpy.context.selected_object
data.objects[one.name].select
print("please select exactly

```

--- OPERATOR CLASSES ---

```

types.Operator):
    # X mirror to the selected
    object.mirror_mirror_x"
    mirror X"

```

```

context):
    context.active_object is not

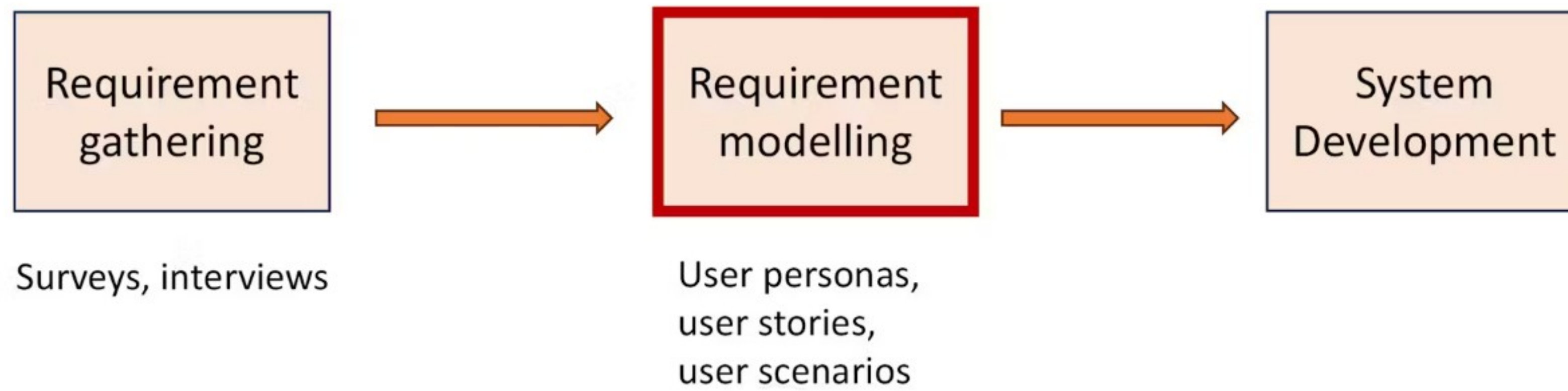
```


The background of the slide is a 3D rendering of interlocking puzzle pieces. Most pieces are light gray, but one piece in the upper right quadrant is a vibrant red. The lighting creates soft shadows, giving the pieces a three-dimensional appearance.

Requirement Modelling

Requirement Modelling

- Helps the team to make sense of the user requirements, and lead the team towards the required system design
- Focus is on 'what' the user wants to achieve with the system and not on 'How'.



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User Personas

User Persona

- A persona is the description of a fictitious user, who does not exist as a specific person, but the description is very realistic
- Personas help identify the user motivations, expectations and goals for using the system,
- what details to provide: name, personality, photo, motivation, goals, pain points etc

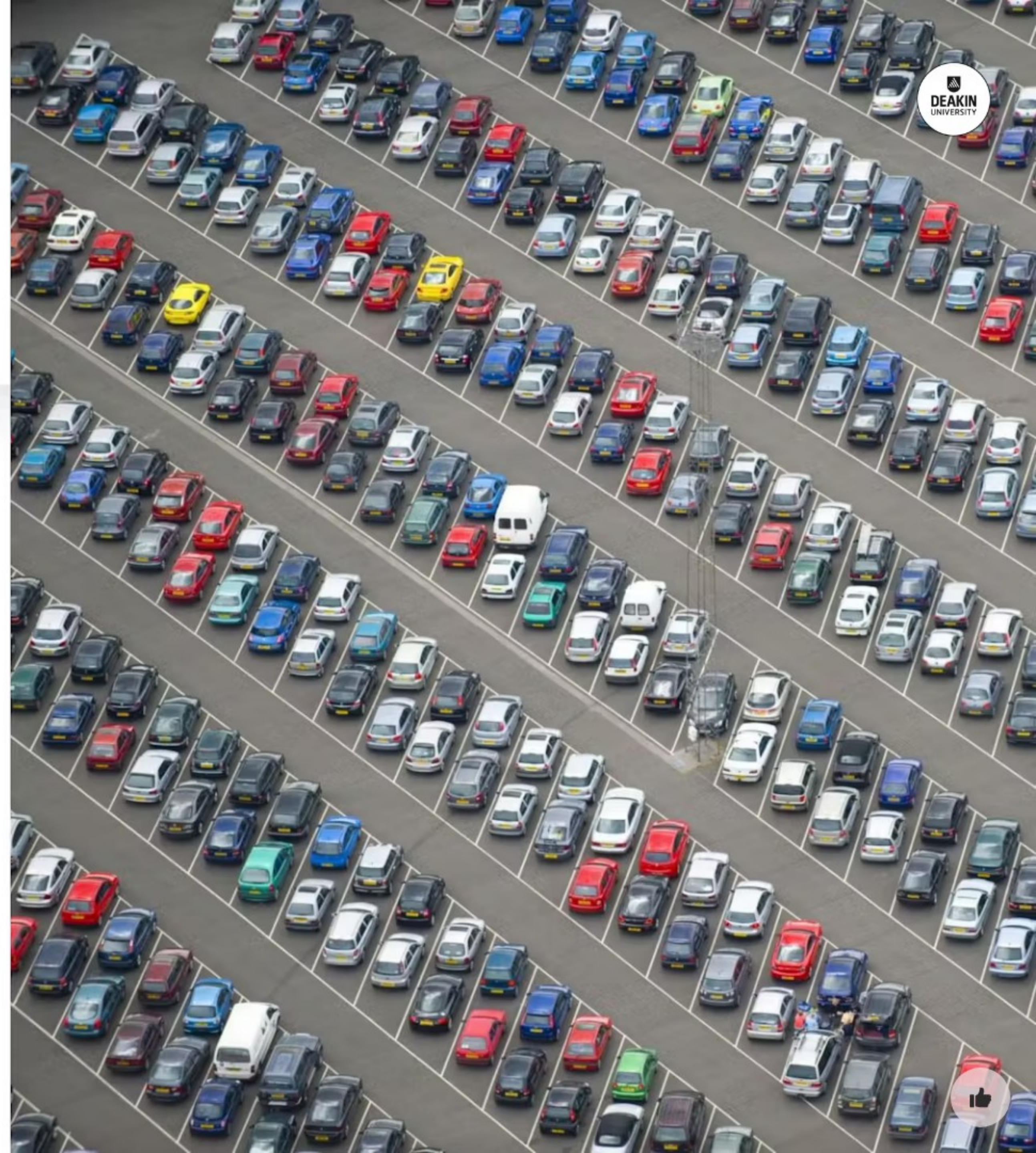
How do we create personas?

- Segment users into distinct groups based on similar goals, patterns and/or attitudes.
- One persona is representing a group of potential users > Ideal number of personas: 3-12





MCC car parking scenario (from last week)


- Imagine Melbourne City Council is employing you to develop a smartphone mobile application to solve its parking problem. This app should help people locate car park spaces in the inner city and pay for parking with ease.





 Janet is a 38 year old married female living in Berlin, Germany.

 Janet is the mother of 4 children, aged 1 to 10.

 Janet lives a busy life, and is often on the go.

"I'm so busy with everything, but I really feel like I should take the kids on a family trip to give them some great memories!"

Janet's Goals and Needs

- Janet wants to plan a trip full of positive memories for her children.
- She feels like she can plan the logistics, but that she needs help with figuring out what family activities to do once she reaches her destination.
- She needs something easy to use, she doesn't feel like she has time to work with complex apps.

Janet's Motivations

- Her main motivation is to create memories for her family.
- To get ideas for family activities while on an upcoming family vacation.
- To find activities that will keep her children busy and happy.

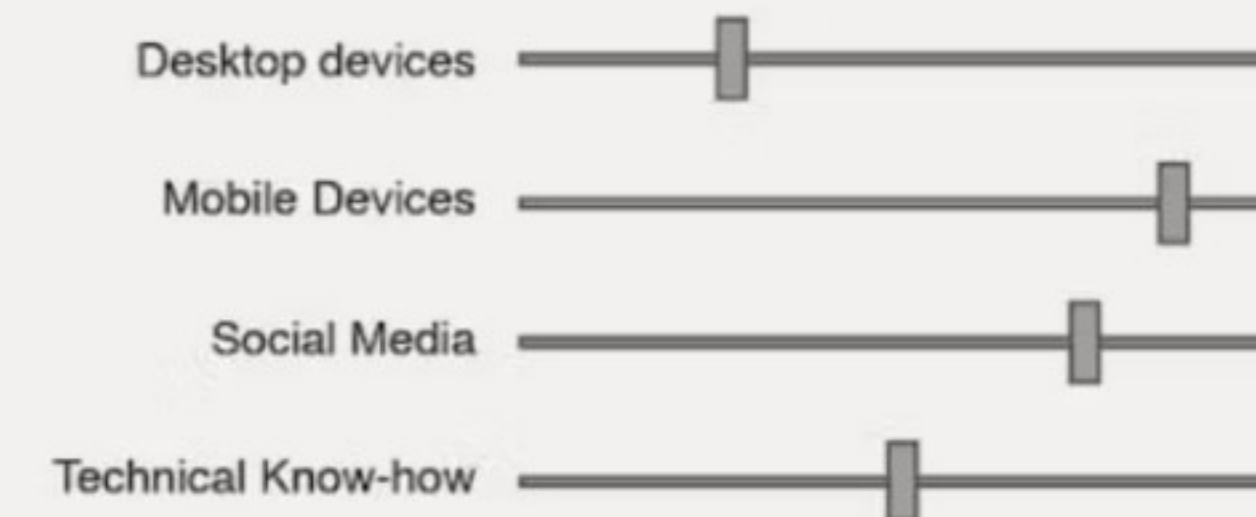
Janet's Frustrations

- Janet always feels like she has very little time to spend on planning.
- Janet is rarely home and needs a solution that will allow her to easily work while on the go.
- She doesn't want to spend time looking up guides when she gets to her destination, they should be easily available when she needs them.

Janet's Everyday Activities

- Get the kids out of bed and get them ready for school in the morning.
- Run errands with the non school-aged kids, shopping, lessons, and pre-school.
- Scheduling playdates and meetings with other parents and friends.
- Changing diapers, cleaning, making lunch, and tons of other small tasks!

Janet's Device and Internet Usage



Janet's Notable Quotes

- *"I would really love to take a vacation from all of this, especially one where I can spend a little along time with my husband!"*
- *"I have tried other parking apps but they do not let me plan my day with different hops."*
- *"It would be great to have something I can just keep on me for the whole trip and refer to whenever I want."*

What do you think Janet needs from the car parking app?

convenience

parking space for specific
date and time and near by
famous location

Make several different
bookings on one day

route planning with
number of parking spot
nearby

Ability to see events in
the area from the app

Not too complicated to
use

to save time

An efficient app that
doesn't take a lot of
time to book spaces.

What do you think Janet needs from the car parking app?

You cannot guess all the different personas a particular program would use.

time limitation

As a mum, I want to be able to schedule bookings. Subscription-based bookings for a month, to have a hassle-free travel.

As a driver, I need to click directly from the application main page to arrange parking and go so that I don't need to follow the instruction

What could be the issues with user personas?

user specific requirements where it'll not be useful for all users

There isn't a one size fits all, so need to be general in observations and insights from focus groups, survey etc

limitations in guessing all the different personas.

Generic description & missed details

too many requirements when dealing with multiple personas

high chance of missing details

is there a limit to the number of personas you can make?

Reminders of booking time ending and when and where next booking starts.

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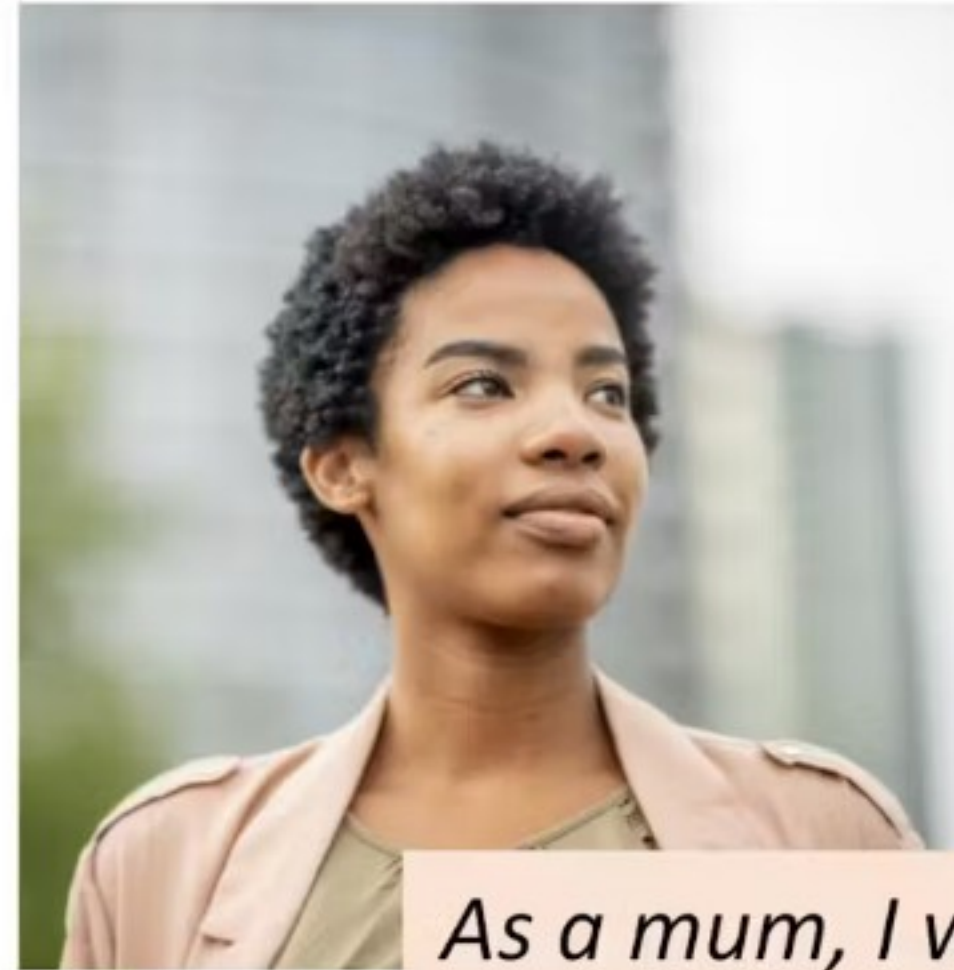


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UserStories

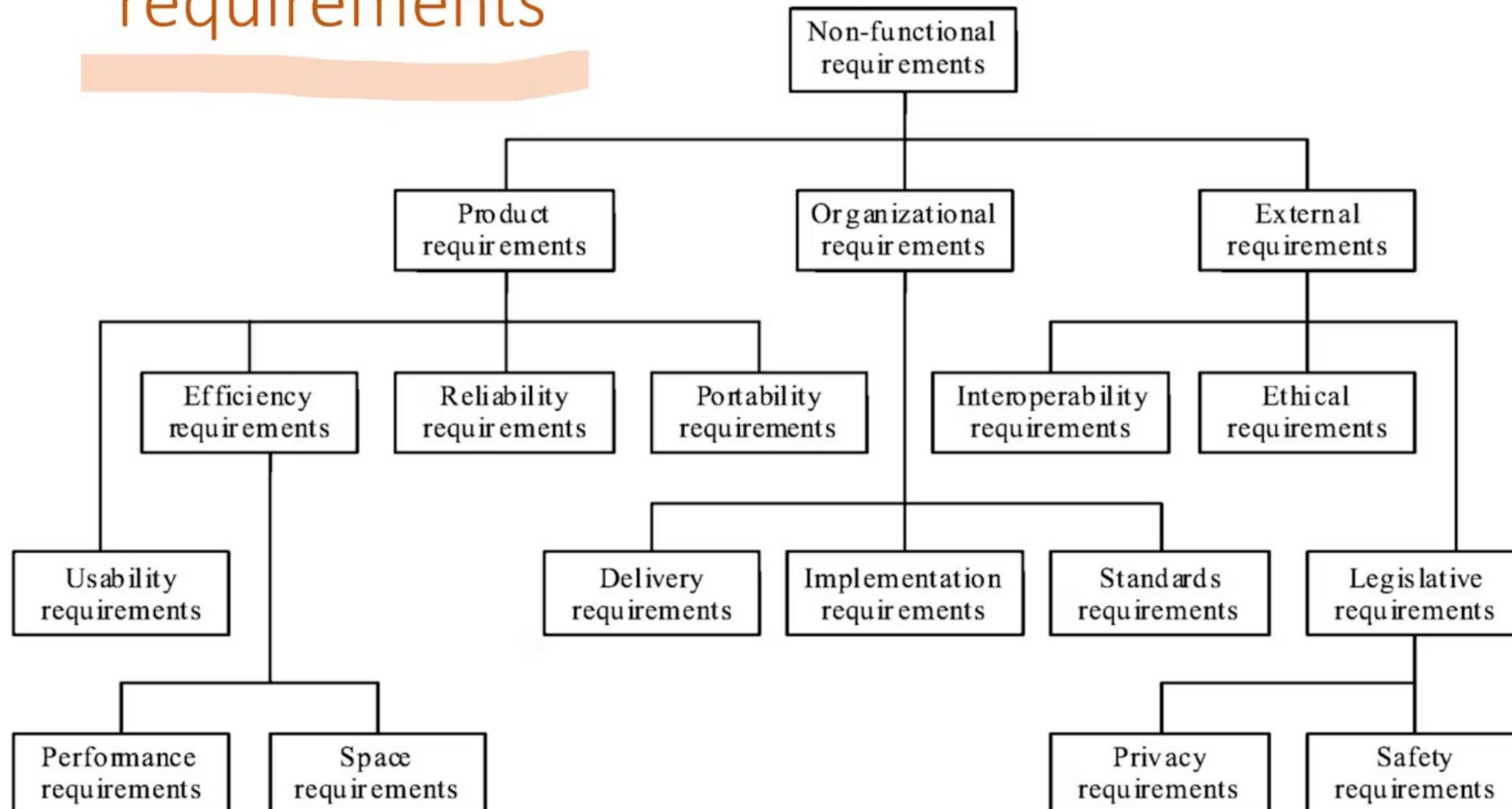
User Story

- A popular technique that is used to communicate what a user may want to do with a system or software and why.
- describes both functional and non-functional requirements.
- Format: As a [persona], I want to [action] so that [reason].



As a mum, I want to be able to plan day trips with my children ahead of time, so that there is no hassle when I am out and about.

Non-functional requirements



What features should be added to the app to support Janet's needs?

as Janet, I need to be able to book multiple bookings so that it's easy for me to plan my day ahead.

there should be a package of multiple parking spots near by the famous location

As a busy professional who is also a mom, it is essential to have a simple straightforward app which is easy to understand.

Need a service that plans complete trip once after giving the destination

As a user/mum, I would want to be able to book parking spots conveniently through an app without logging in everytime I open it.

As a professional, I need to schedule bookings. or could have a subscription-based model to travel hassle-free while working peacefully.

As a parent of four kids, I need to have the information of childcare facilities near the parking spot so that i can get access of them when needed.

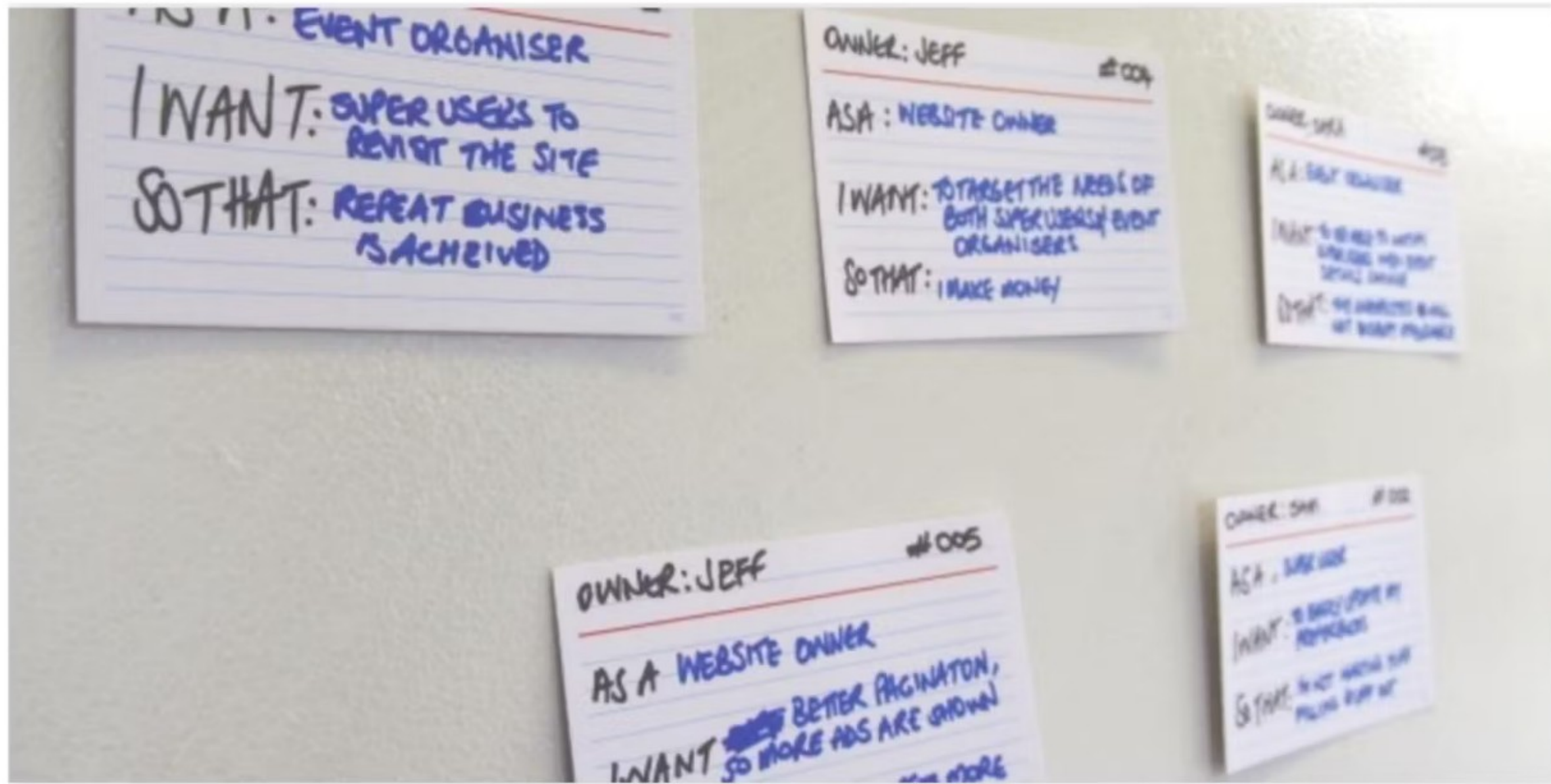
As a busy mum, I want to be able to save parking spots close to my frequently visited locations so that I can access them easily

A dark blue silhouette of a person's head and shoulders is positioned on the left side of the slide. A large, light blue, semi-transparent arc curves from the top left towards the bottom right, framing the central text.

Prioritising user stories

Prioritizing user stories

- The team adds a priority score to each user story to communicate the importance of specific product features.
- There is no fixed way to assign a score. Some factors used are efforts, risks, and unknowns.



Giving scores to stories



Janet is a mother of 4

Speaks multiple languages

She is tech-savvy.

She uses mobile and
computer both.



Lee is retired.

Can only speak Mandarin

He is not tech-savvy.

He does not use mobile
devices much.

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Usage scenario

Usage Scenario

- Provides information about what users expect from the system.
- highlights the steps taken by a user without revealing any system specific details.
- Highlights: actor, environment, goal and tasks



Janet enjoys going on short trips with her children within the city. She loves to take her car as it makes things easier and accessible. She aims to plan her trip well in advance from her home itself to minimize last minute stress.

Janet is looking for an app that lets her book the car parking spots with a window (to allow late arrival) and an option to cancel, if need be. She wants to be able to open the planner to remind herself which car parking spots she has booked and at what time.

What are the actor, environment, goal, and tasks?

So Persona means group of feedbacks which was collected in surveys right ?

Actor: Janet, Her children
Environment: City
Goals: To let her book last minute with the option to cancel. Tasks: Plan trips

Actor: Janet
Environment: parking spot
Goal: Book car parking spot with a window
Task: An app to book/cancel the parking slot with the time details

Actor : Janet
Environment: In City
Goal: To park easily with cancellation
Task: Shows the real time parking spots available or not

actor: Mother
environment: traveling
Goal: convenient booking process
tasks: book, window reminder

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Let us look at the tasks now.

Thank you!

I will see you all next week.

