



SAGE

/ 'seyj ' /

adjective, sag·er, sag·est.

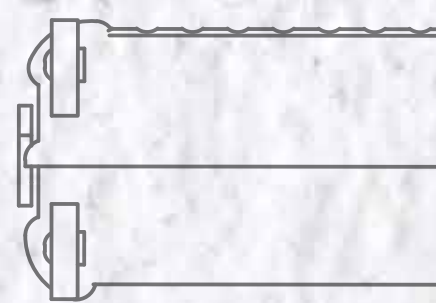
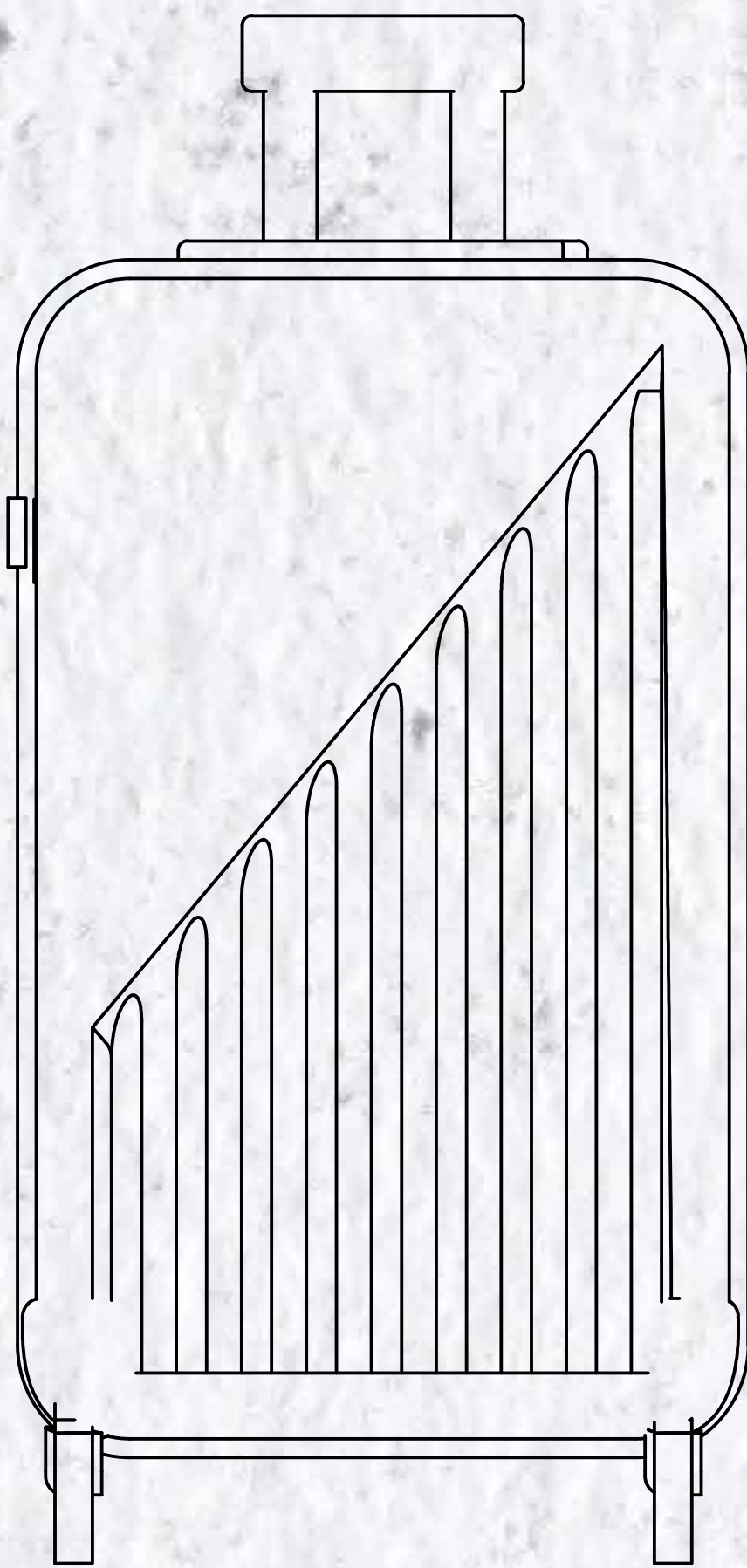
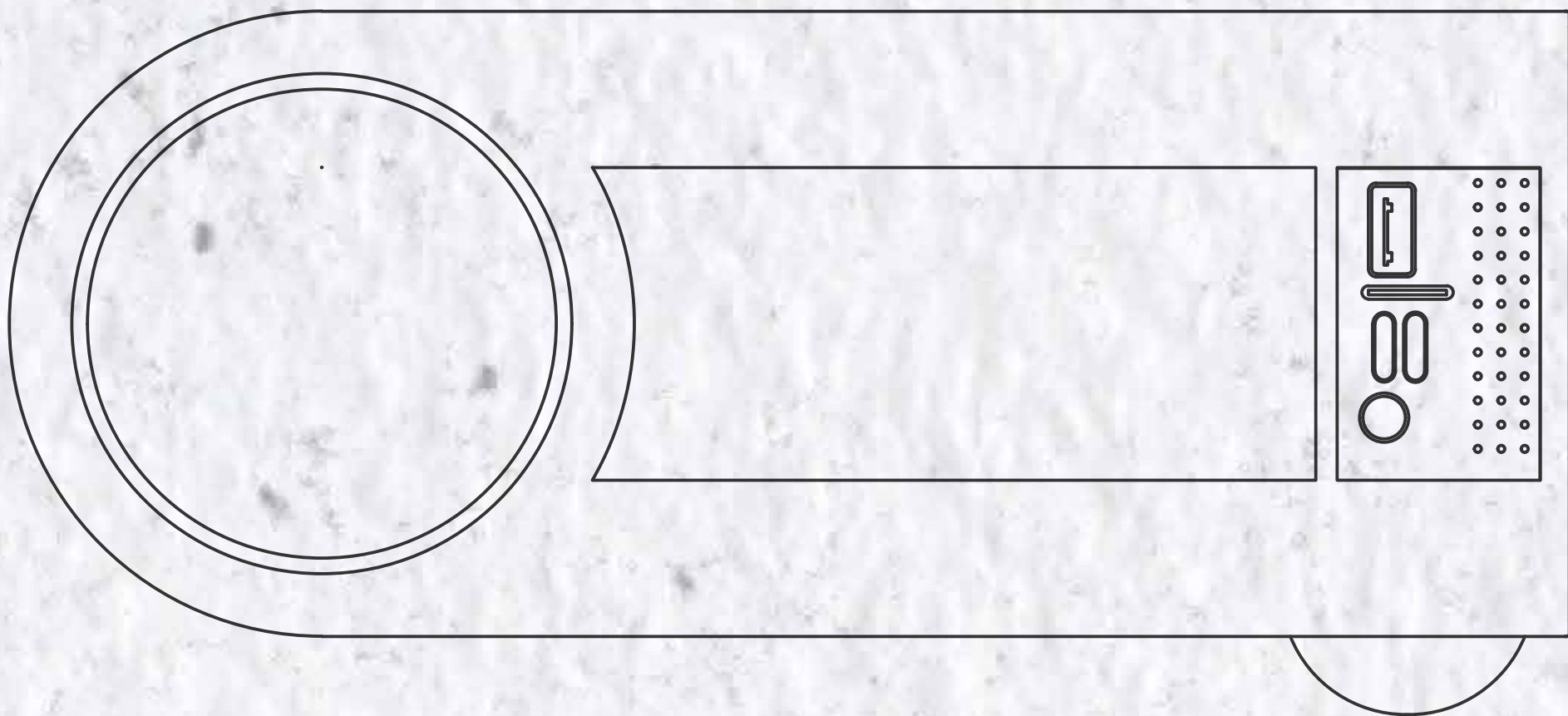
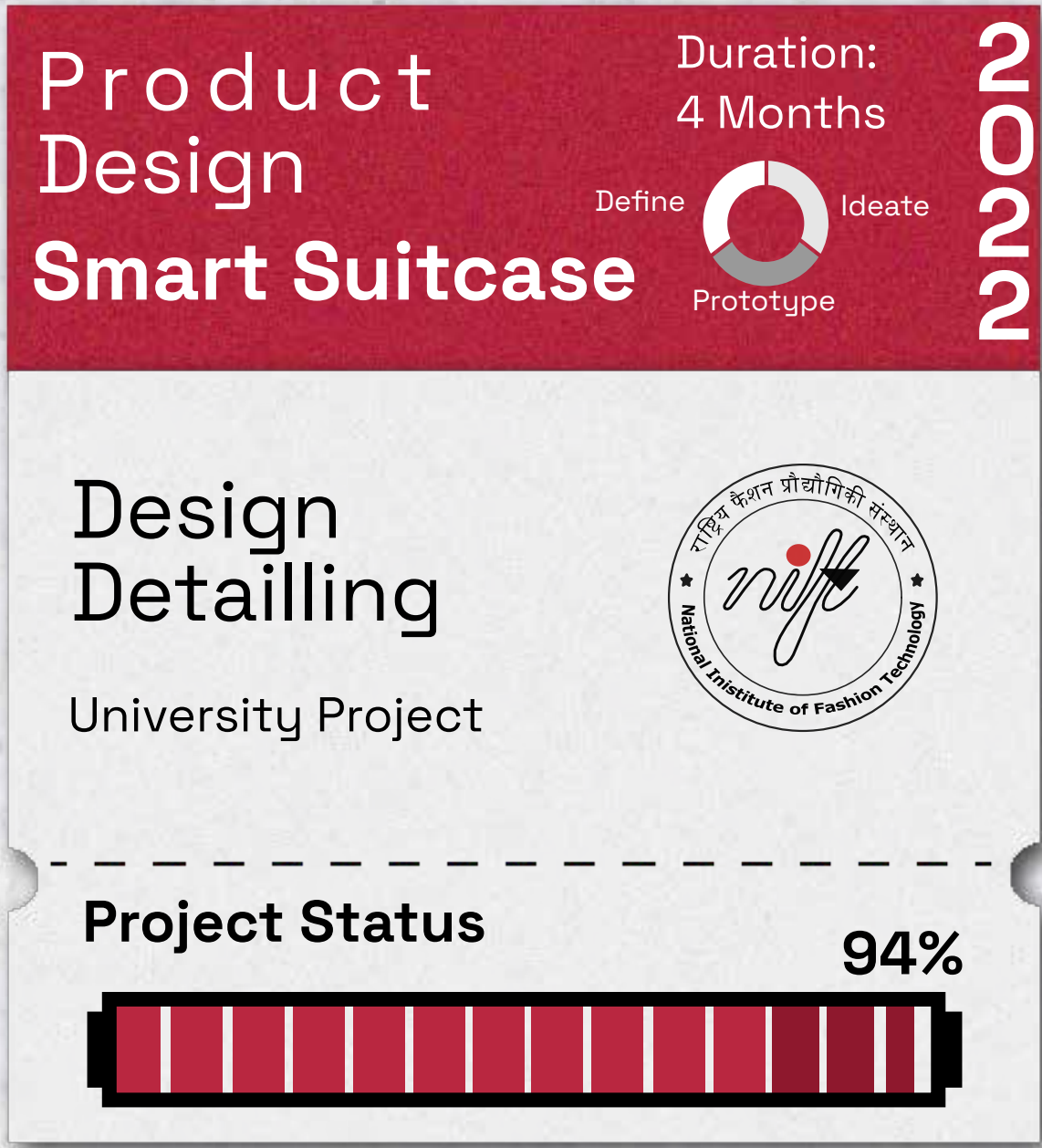
wise, judicious, or prudent.

A sage is traditionally seen as a knowledgeable and trusted advisor, and this reflects the suitcase’s role in simplifying and enhancing the travel experience. The name implies that the suitcase is not just a passive travel accessory but a smart companion that offers valuable insights and support to travelers.

Project Brief

The primary objective of this project is to design and develop a smart suitcase that incorporates an ARM (Advanced RISC Machine) chip for enhanced functionality and connectivity. The smart suitcase will provide a range of features and capabilities to enhance the travel experience, ensuring convenience and security for users.

Project Details



Who likes 'sage'?

Conventional users

- Vacation
- Corporate Trips
- Visiting people in different cities
- Picnic or short trips

Alternative users

- College students
- Business owners for portable stalls
- Equipment carriers

The Chronicles of 'sage'

A suitcase is something which stays with us throughout our journey.

- It runs with us to places
- We can sit on it while waiting for our ride
- It becomes our whole closet when away from home
- We weigh it a million times before getting on a plane
- Sometime when travelling in a car it becomes our headrest
- Clothes stay wrinkle-free in a suitcase too

- but sometimes,
- it gets lost with no way to return home
 - or one of the wheel gets tired of carrying much weight
 - or sometimes the hardcase doesn't fit into small spaces
 - or sometimes the zipper can get stuck
 - or the lock broken

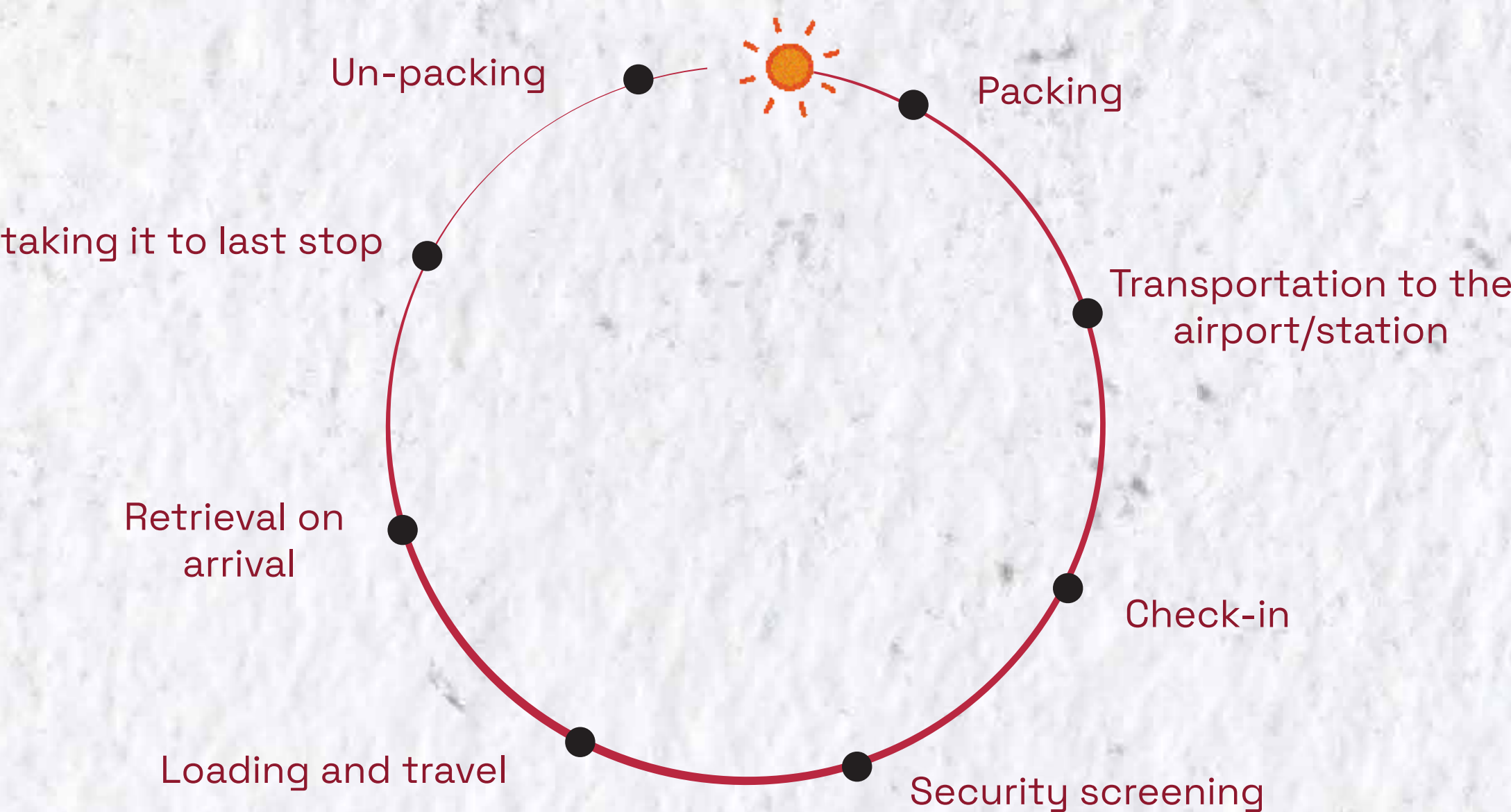
The Qualities of 'sage'



Trends | Key Features



The Journey of 'sage'?



Problems one might face without "Sage"

Loss or Misplacement of Luggage: Passengers frequently experience the loss or misplacement of their luggage during travel, leading to frustration and delays.

Limited Connectivity: Traditional suitcases lack built-in connectivity features, such as tracking and remote control, which could help travelers keep better tabs on their belongings.

Security Concerns: The security of luggage is a significant concern for travelers. A smart suitcase could provide enhanced security features.

Inefficient Packing: Many travelers struggle with packing efficiently, leading to issues such as wrinkled clothes and disorganized items.

Weight Management: Overweight luggage can result in extra fees at the airport. Some smart suitcases have built-in scales to help travelers weigh their luggage and avoid additional charges.

who loves 'sage' ?

TARGET USER

In a world where everyone is moving onto better things with the fast paced technological developments, moving to different cities. Sometimes that demographical changes we forget how hard it can get for our parents to cope up.

So Sage is specifically made for the age group 55+. All the assistance required for people with less or no experience at all.

From International to National it covers all their needs as well helps the kids to keep a track of them and their belongings.

why loves 'sage' ?

It can help to decrease the physical strain, security features and is greater convenience for elderly. Additionally, amenities like built-in chargers and simple-to-use wheels can make moving around hotels and airports less strenuous and more convenient.



Think & Feel

- Why is everything so complicated?
- Where should I go now?
- When will my luggage be here?
- Am I sitting at the right gate?
- When should I call the taxi?

Say & do

- I will figure it out
- This should be the right place
- Take help from people around and feel embarrassed
- Forget to take medicines on time

Hear

- You should not be traveling alone
- You are doing this wrong
- Where are your kids?
- You will lose your belongings

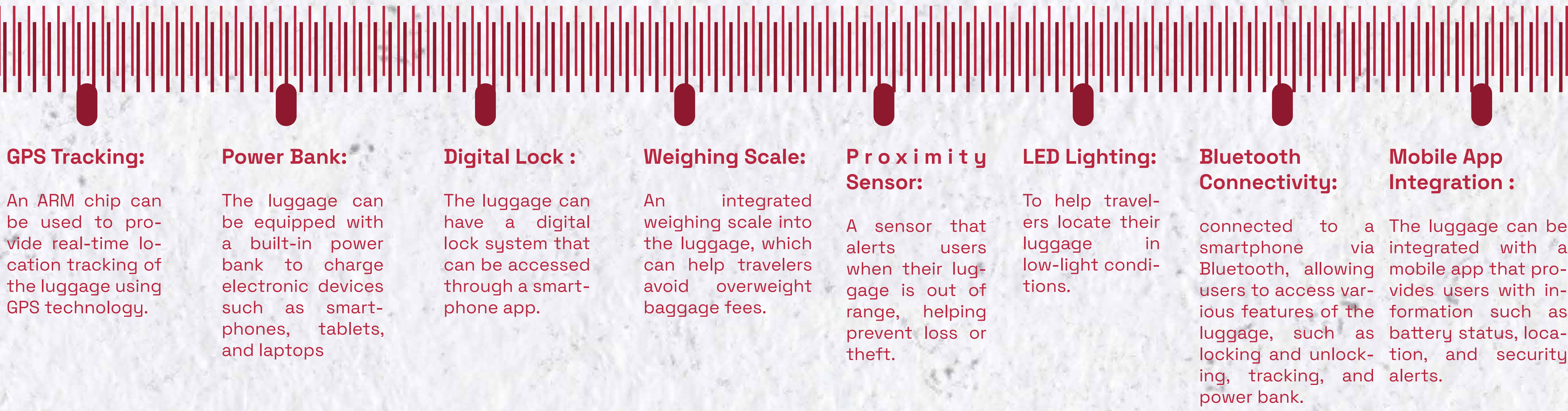
See

- People travelling with families
- Complex mechanisms and through security checks
- Extra charges for everything miniscule

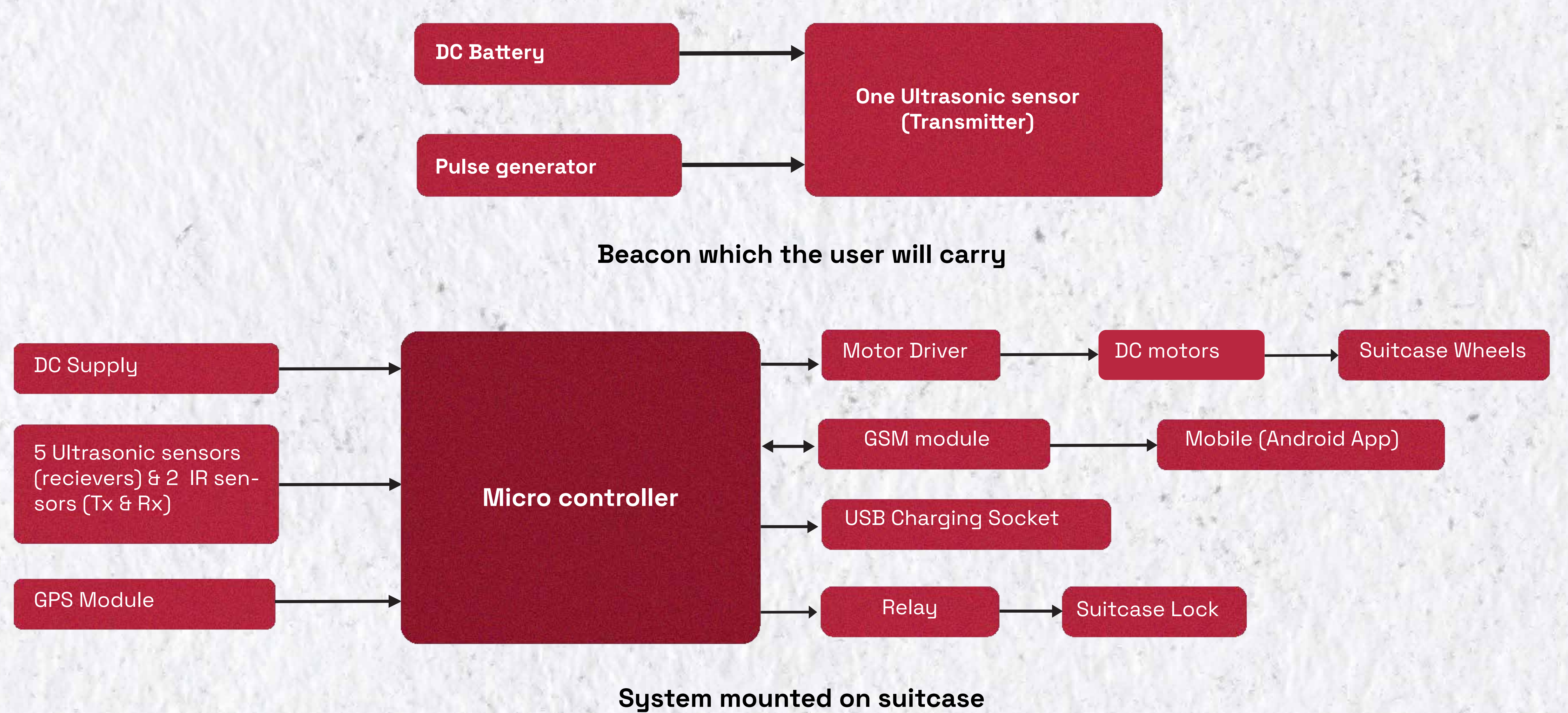
DESIGN BRIEF

Brief	Brand	Price Range	Material	Application
To design a suitcase incorporating an ARM chip which helps the user making the travel transition to a new place easier as well as the navigation on travel stations like airports, railways etc more comfortable	American Tourister/ Samsonite	Premium Medium range	Hard shell Polycarbonate : because it is -Lightweight -Durable, and -Impact-resistant	Digital Scaling Remote Locking Texting Alerts Real-time Tracking Proximity Sensors
Target Audience	Key Milestones			
DEMOGRAPHIC	GEOGRAPHIC			
Age: 50 and above Gender : Any Education : Employed, Unemployed, Retired etc Marital Status : Any	City: Bengaluru Region : South Country : India			
ARM Chip Integration: Integrate the ARM chip into the suitcase and establish connectivity. GPS Tracking and Security: Implement GPS tracking, security features, and the remote lock-unlocking system. Smart Packing Assistance and App Integration: Develop smart packing assistance features and integrate them with the mobile app.				

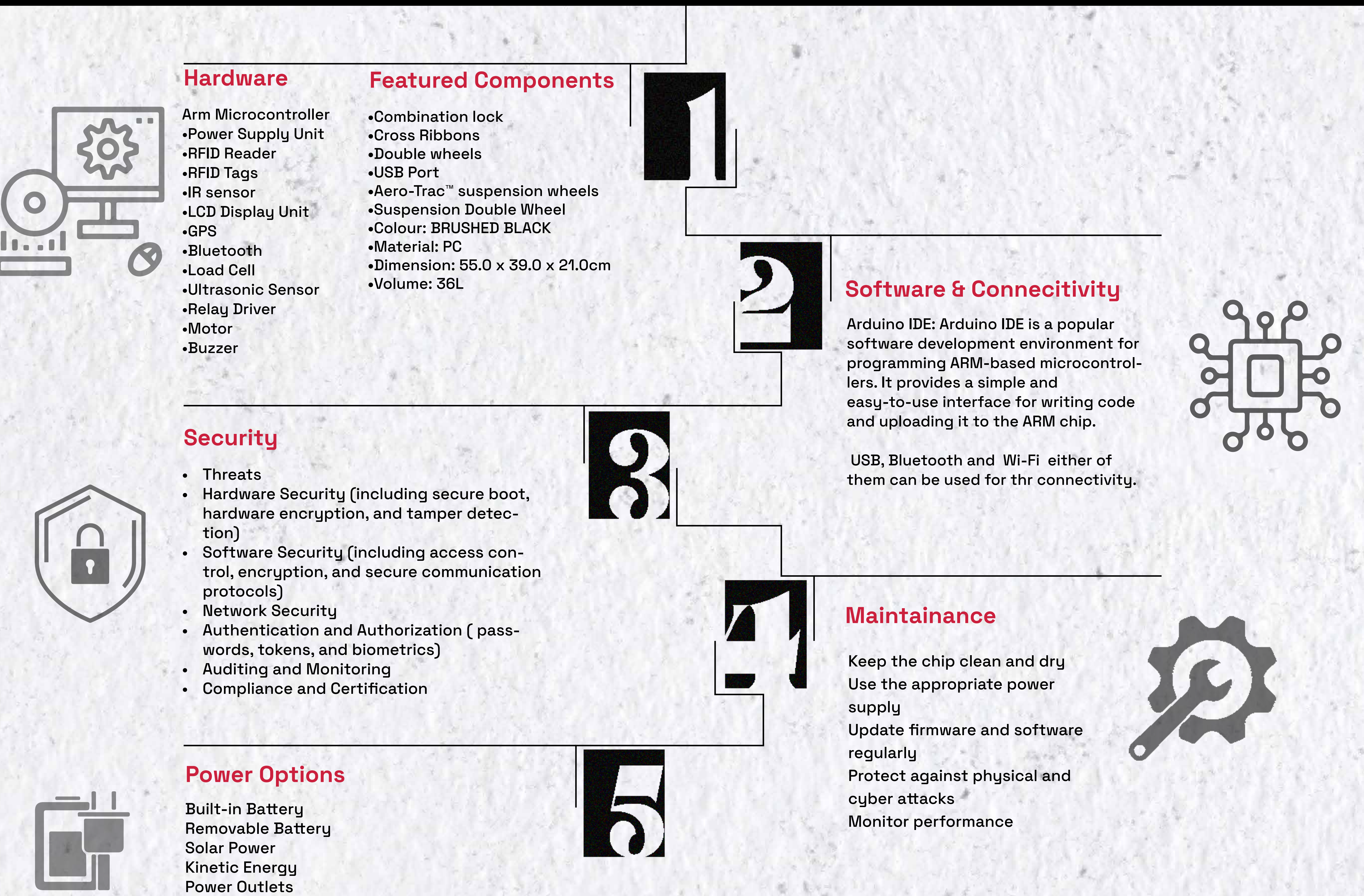
HOW AN ARM CHIP COULD HAVE VARIOUS FEATURES THAT ENHANCE THE USER EXPERIENCE



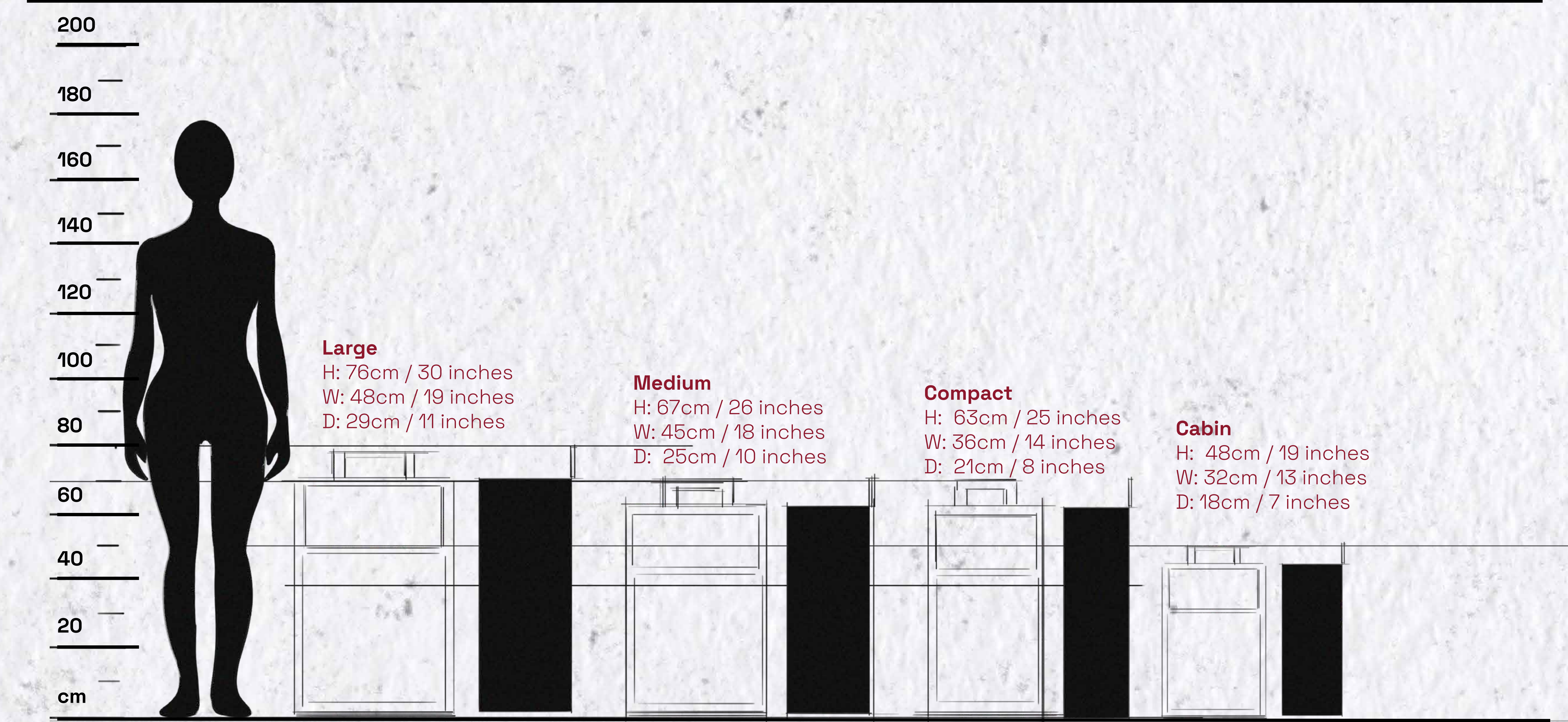
BLOCK DIAGRAM FOR SMART SUITCASE



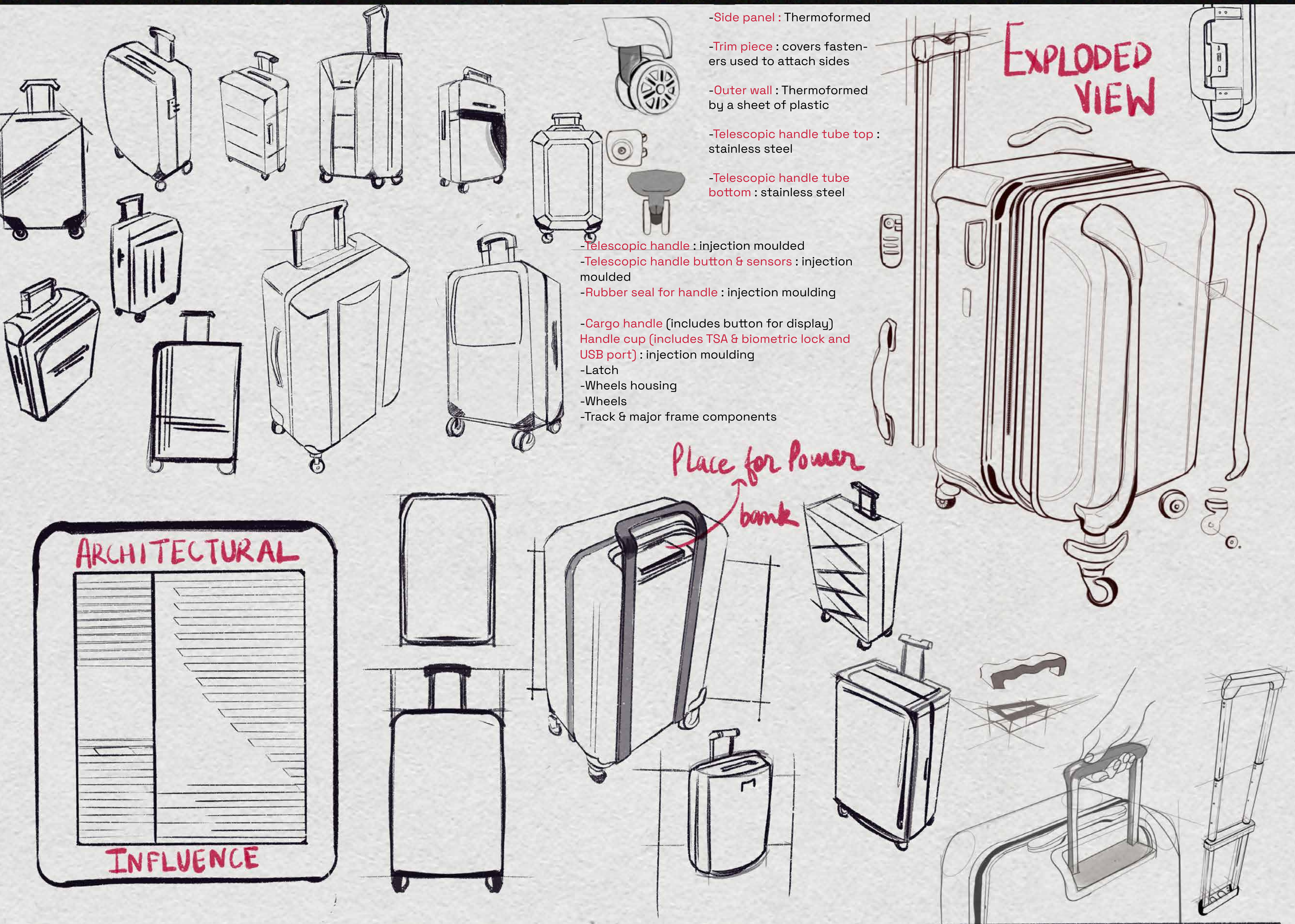
REQUIREMENTS FOR SMART SUITCASE “SAGE”



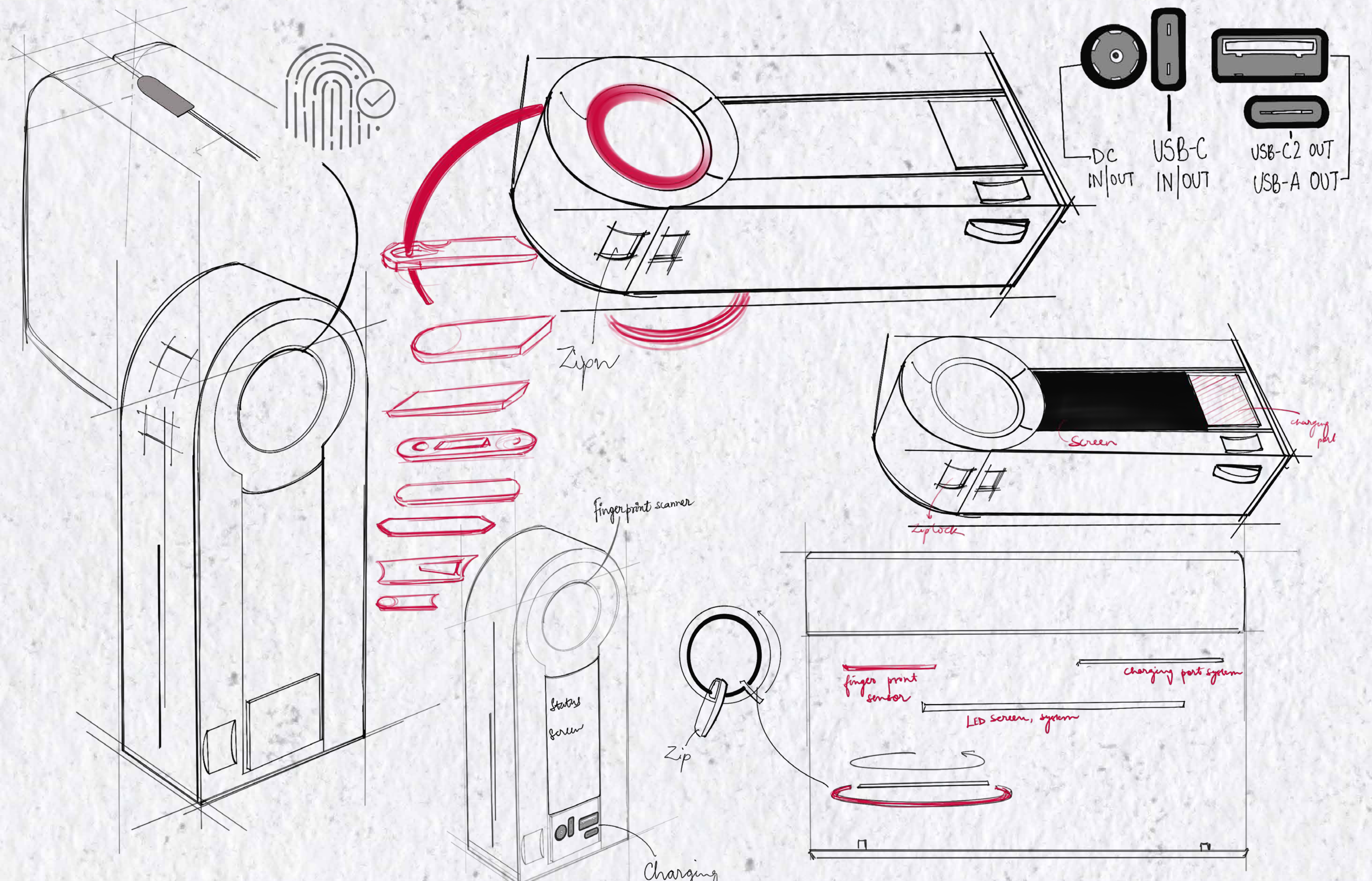
STANDARD SUITCASE SIZES



FIRST ITERATIVE CYCLE



SECOND ITERATIVE CYCLE



1. Screen:

Display Panel: The main visual component of the screen, available in different types such as LCD, OLED, or e-ink.

Display Driver: A chip responsible for converting digital signals into visual output on the display.

Touchscreen Technology: If the screen is touch-enabled, a capacitive or resistive touchscreen layer is required.

Backlighting: For improved visibility, especially in low-light conditions.

Control Interface: Circuitry and connectors for user interaction and communication with the suitcase's main system.

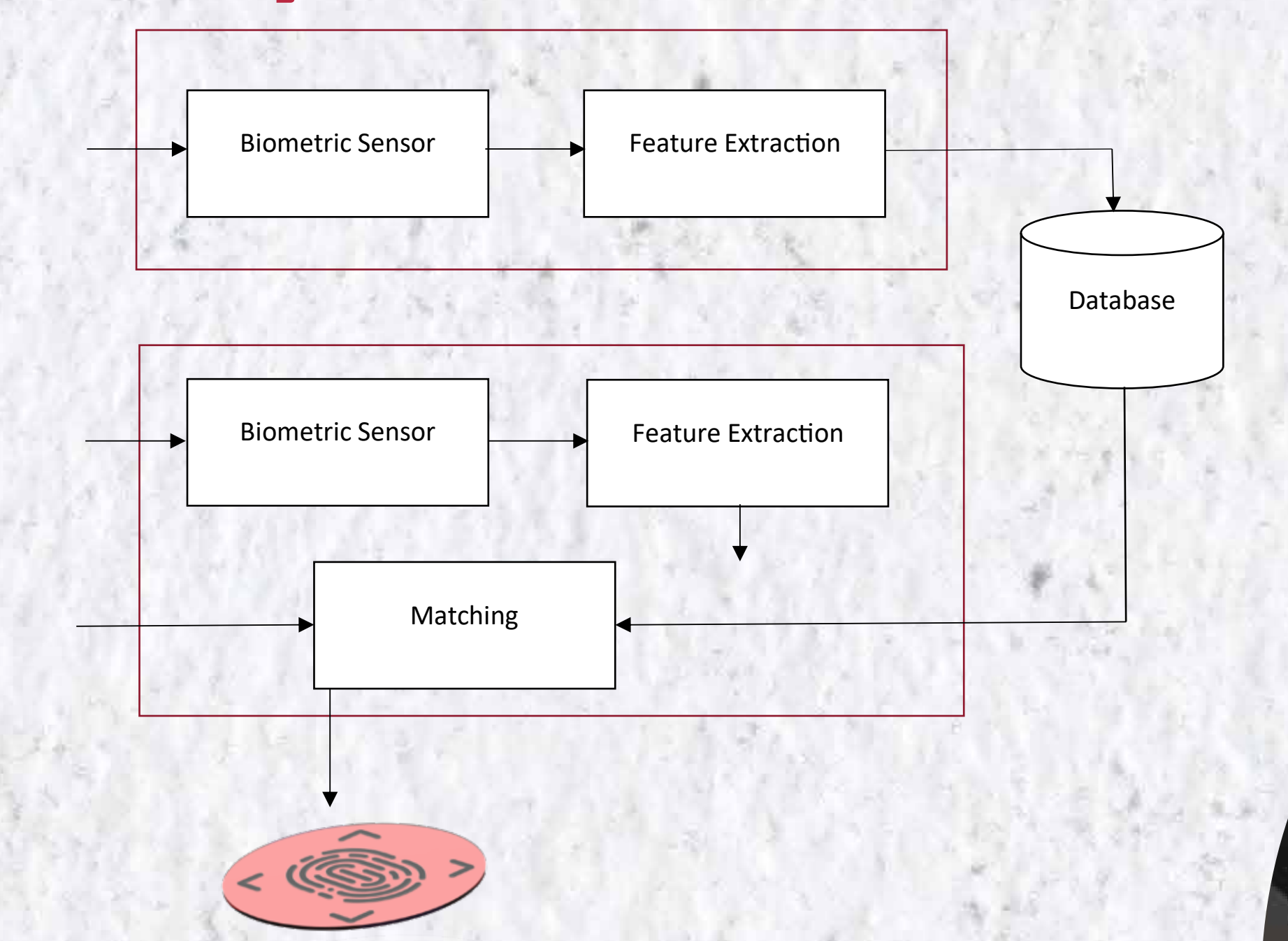
2. Fingerprint Lock:

Fingerprint Sensor: Captures and authenticates the user's fingerprint for security.

Microcontroller Unit (MCU): Processes fingerprint data and communicates with the lock mechanism.

Lock Mechanism: Physical or electronic mechanism that controls access to the suitcase.

Power Supply: Power source for the fingerprint sensor and lock system.



3. Charging Port:

Charging Connector: USB Type-C, Micro USB, or other connector types for device compatibility.

Charging Circuit: Regulates the power flow from the suitcase's power source to the connected devices

- Power Management System: Controls and manages the power distribution to prevent overcharging and protect connected devices.

Indicator Lights: LED indicators to show the charging status.

Power Source: Internal battery or external power input for charging.

