

Need help to submit your application?

# Welcome to Solve for Tomorrow Design Thinking Toolkit

This interactive tool will guide you through each step of the Design Thinking process. All the best for your application.

Let's go →





# What's Samsung Solve For Tomorrow?

A competition like no other. It's a chance for you to design the future, exploring how tech can be used to solve a problem you care about.

## Why take part?

You dream it, we'll help you build it.

We're giving you the tools to solve a problem that matters to you. Start by coming up with an idea - we'll help you do the rest.

## Programme Milestones

#### **Top 100 Shortlist**

- Top 100 to submit videos for further shortlisting to Top 40
- All 100 shortlisted will be awarded 'Certificate of Participation'

#### Top 40 Semi -Finalists

- INR 20,000 cash prize each for all 40 shortlisted along with Samsung Products
- Samsung Office Visits
- Innovation Boot camp & Prototyping at IIT Delhi

#### **Top 20 Finalists**

- INR 1 Lakh cash prize each for all 20 shortlisted along with Samsung products.
- Online 1:1 training & mentoring by Samsung & Industry Experts

#### 4 Winning Teams

- Winning Teams will get INR 1 Crore Incubation Grant.
- Other Awards:
- Young InnovatorAward INR 1 Lakh x 2
- o Goodwill Award INR 1 Lakh x 2
- Social Media Champ
   Award INR 50,000 x 1

Don't just take our word for it. Click on our past winners to hear their thoughts.



Sayed Safran Ullah Khabir



Shambhavi Sinha



Arpit Kumar



Abhiieet Kumar





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## So, how should you use this resource?

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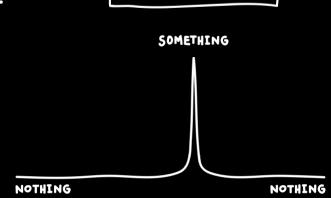
The Design Thinking Toolkit is for you if you're...

- Looking to make a difference
- Keen to come up with an idea of your own
- Not sure how to get started

## Don't know where to start? No problem.

Follow the steps and you'll start to build a picture of your idea.

You can complete this in as little as 45 minutes and save and return at any time.



BRAINSTORMING







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## What is Design Thinking?

And how can it help you to come up with an idea?

Design Thinking' process will help you to create solutions to solve real world problems and drive social change.

## Design thinking is a human-centred approach to problem solving.







Here's the steps followed in the Design Thinking process:

1. Empathise 2. Define 3. Ideate 4. Prototype 5. Test







## Step 1: Empathise

## Who needs your help, and why?

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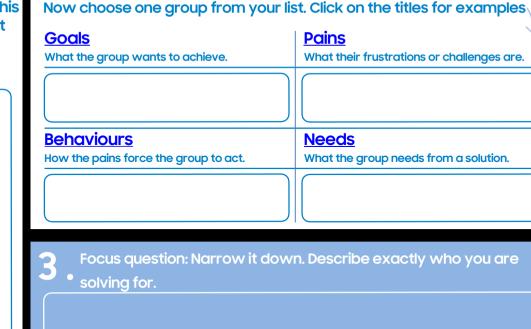
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- What's something you'd change if you could? Take inspiration from your own experiences.
- Al for safer, smarter & inclusive Bharat
- Future of health, hygiene & wellbeing in India

- Social Change through Sport & Tech: For Education & Better Futures
- Environmental Sustainability via Technology

Who's affected by this Who's affected by une problem? Make a list of different groups:



Goals	Pains
What the group wants to achieve.	What their frustrations or challenges are.
<u>Behaviours</u>	<u>Needs</u>
How the pains force the group to act.	What the group needs from a solution.

Focus question: Narrow it down. Describe exactly who you are solving for.







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Step 2: Define

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<u>Insight</u>

> Opportunity

6

Out of every problem, there's an opportunity... let's find it!

Click on these to show how problems can become opportunities

<u>Needs</u>	<u>Aspiration</u>	<u>Barriers</u>	<u>Frustration</u>	<u>Opportunity</u>

Focus question: So, what opportunity is there for tech to solve the problem?

#### Tips:

- Define your user's point of view
- · Say what they are trying to do
- · Have 'tension' (what's stopping them?)
- · Be new / a little surprising







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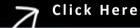
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Submit

Looking for a tip?

## Step 3: Ideate

Let's do some creative thinking to start solving the problem.



- Here are some ideation techniques to get you started. Remember, this is your chance to dream up something that truly makes a difference.
   The sky's the limit! What will YOU create?
- 2. How many ideas can you come up with in 5 minutes? Grab a piece of paper and write as many as you can. Here's some tech possibilities to inspire you:



**Apps** 





media



devices



**Robotics** 



Wearable



Voice tech recognition

- Take a small break, then come back with fresh eyes. Review your ideas and pick the one that best solves your user's problem.
  - Head <u>here for an example</u>, as well as tips on how to choose just one idea.

Focus question: The big moment! What is your game-changing idea?







## Step 4: Prototype

Bring your idea to life. Build it, test it, and see how it stacks up.

What's a prototype?

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Click on the icons to see the many ways to prototype.

- Sketch, build or describe, it's up to you. Create a prototype and take a photo of it.
   If designed digitally, make sure you've saved it online so you can share the link!
   Need inspiration? Head here for an example.
- Pocus questions:
  - 1. Is your prototype working as planned?
  - 2. Are there any tweaks or improvements you could make?
  - 3. And, most importantly, is it solving the problem you set out to tackle?







## Step 5: Test optional but recommended

Test, collect feedback and upgrade your prototype. On repeat.

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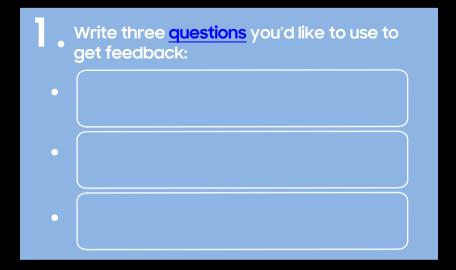
Step 5

Submit

Testing is important. It's where you find out what works... and what doesn't.

Don't stress if it isn't perfect yet. Shortlisted entries will get the chance to refine their ideas, and we'll even help you build your own prototype.

<u>Take a look at the Samsung testing process.</u>



2.	Feedback you gathered:	









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Step 6 : Submit

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# Congratulations!

You've made it to this page because you've created a great solution for something that matters - well done!

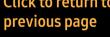
By completing the Design Thinking Toolkit, you can:

- Apply Design Thinking to a problem
- Feel inspired to become an innovator for the future
- Enter the Solve for Tomorrow competition by completing the application form on the website

(to be hyperlinked with SFT website)

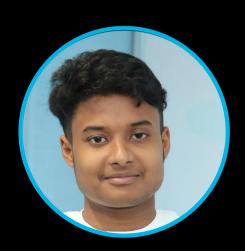












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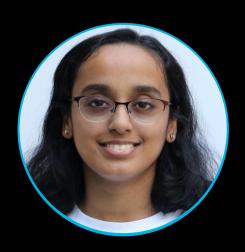
Solve

"When you come across a problem, you have three options. Some people live with the issue. Some people complain about the issue. But someone needs to think about how to solve the issue. With this thought, starts innovation."

Sayed Safran Ullah Khabir (Team Eco Tech Innovator) Solve for Tomorrow 2024 Community Champion.







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"Ideas and passion are not always enough. There are more challenges than milestones. It sounds simple and straightforward. But the real journey is not like the movies."

Shambhavi Sinha (Team - METAL)
Solve for Tomorrow 2024 Environment Champion.









"When someone says innovation, the first thing that comes to mind is a high-tech startup.

But in reality, all you need is a unique idea that solves a real problem."

**Arpit Kumar (Team - METAL)** 

Solve for Tomorrow 2024 Environment Champion.









"Your degree, age and status doesn't matter. School, IIT, Bangalore or a small village. If you put in effort and hard work on your idea, you can bring it to reality."

Abhijeet Kumar (Team - METAL)
Solve for Tomorrow 2024 Environment Champion.







Goals example: The goal is for women in India to travel at night safely and confidently. They should have access to reliable security measures and support systems, allowing them to move freely without fear or dependence on others.





Pains example: Pains for women traveling at night in India could be:

- Fear of harassment or assault
- Limited access to safe transport options
- Lack of well-lit and secure public spaces
- Constant need to stay alert and take precautions





Behaviours example: The pains could cause women traveling at night in India to:

- Avoid traveling alone or at late hours
- Choose longer or costlier routes for safety
- Constantly share live location with trusted contacts
- Carry self-defense tools like pepper spray
- Feel anxious and on high alert while commuting



Needs example: Women traveling at night in India need tech that enhances their safety and confidence. They need tools that provide real-time location tracking, emergency alerts, and access to verified transport options. This is an opportunity to develop a solution that ensures safer travel, reduces fear, and empowers women to move freely without worry.





Needs example: Women in India want to travel at night freely and safely, without feeling vulnerable or afraid.







**Aspiration example:** To develop a tech solution that offers real-time safety alerts, location tracking, and emergency support, empowering women in India to travel at night confidently and securely.







Barriers example: Limited access to reliable safety technology that helps women travel securely at night.





Frustration example: Women feel vulnerable, anxious, and restricted when traveling late at night due to inadequate safety measures and the constant fear of harassment or crime. This severely limits their ability to work, study, or even step out for essential needs after dark.



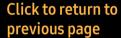


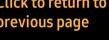
Opportunity example: The lack of reliable safety tools, such as apps or devices that provide real-time alerts and assistance, makes it difficult for women to travel safely at night without fear, thus creating a significant opportunity for innovation.



Insight example: Women in India often feel vulnerable, anxious, and restricted when traveling late at night due to inadequate safety measures, lack of reliable transport options, and fear of harassment or crime.

Opportunity example: To create tech solutions that offer real-time safety alerts, secure travel routes, and emergency assistance, empowering women in India to travel at night with greater confidence and security.







Focus questions example: Women in India want to travel confidently at night, without fearing for their safety or constantly relying on others. However, they face challenges like unreliable transportation, inadequate safety measures, and potential threats, which make them feel anxious, vulnerable, and restricted.

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Could technology offer solutions that provide real-time safety alerts, secure routes, and emergency assistance, allowing women to travel more freely and safely at night?









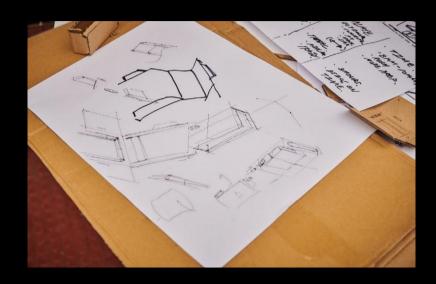
Tip:

Don't worry about being perfect—right now, it's all about throwing out as many ideas as you can.









Draw sketches on paper to quickly test ideas.







Using basic materials like cardboard, foam, clay, and cellotape to create rough models.





Use an app to create an animation that brings the idea to life.









Use building blocks to visualise concepts.







Create a storyboard to show how a user would interact with the product or service.









Tip:

Don't worry about your first prototype looking beautiful - you'll get the chance to perfect it later.





- 1. What do you think this product is supposed to do?
- 2. Are there any features that are confusing or hard to navigate?
- 3. Are there any changes you'd suggest to the design?

ula need to get permission to plac



One-Tap SOS Button
Discreet wearable device
to instantly alert
emergency contacts

## Ideation example

Here's how ideation could look if you choose to brainstorm.

#### Problem:

Women in India want to travel at night safely and confidently, without fear or reliance on others. They seek secure transportation options and real-time safety measures to feel as protected as everyone else while commuting after dark.

#### Step1:

Come up with as many ideas as you can.

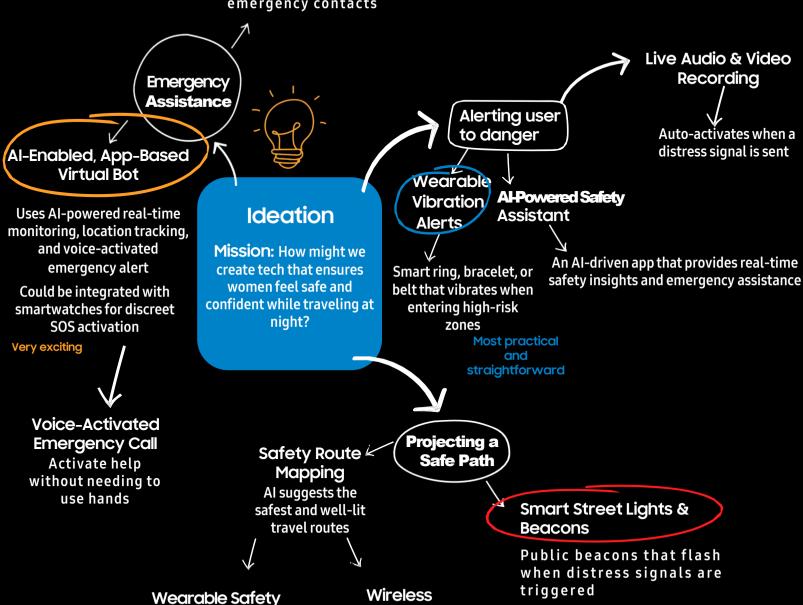
#### Step 2:

Evaluate and colour code using these categories:



Most practical





Headphones

Give real time safety

alerts

**Indicators** 

Smart glasses display

real-time safety alerts



#### **Ideation techniques**

## Brainstorming

Brainstorming, whether done individually or in groups, is all about generating ideas freely without judgement – focus on producing a wide range of ideas, not on making them flawless. In brainwriting, instead of verbalizing, everyone scribbles or doodles their ideas anonymously, before discussing them as a group.

## 2. What if ...? How might we ...?

Ask questions related to your topic. Like, "What if tech could make homework fun?" or "How might we use wearable tech to support mental health?" These questions can help you spark new ideas and think outside the box.

#### 3. Making a wish

It's like daydreaming - imagine any solution you want, no limits. Anything is possible. Then, dial it down. Is there a way to make that wish come true? Dream big and turn wild ideas into realities.

#### 4. Bottom-up Approach

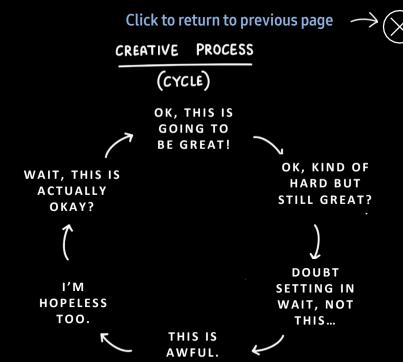
Switch it up: instead of solving the problem, imagine how you could make it worse. Then, flip those ideas to uncover new solutions. This could help you see the problem from a fresh angle.

#### 5. Idea Remixing

Take an existing idea and explore how you could remix or tweak it. For example, if you know of an app that already exists, think about how it might work in a different context or for a different audience, like a game for a school.

## 6. Network Mapping

Think of asking friends, family, or even online communities for their ideas or feedback on your topic. The goal? To get fresh perspectives and ideas from all kinds of people.



## **Conditions for creativity**

#### 1. Take breaks

Get moving! Physical activity clears your mind, sparking fresh ideas.

#### 2. Set a time limit

A time limit boosts urgency, driving quick, creative thinking. Try the Pomodoro Timer hack: 25 minutes work, 5-minute break.

#### 3. Collaborate with others

Team up with others. Sharing and building ideas can lead to brilliance.

#### 4. Doodle and Daydream

Relax and let your thoughts wander. Great ideas often come when you're not forcing them.



## Prototyping examples

Not sure what a prototype is? Or need some ideas before making your own? Look no further - here's some examples.

## Safe Route App - A Smart Safety Companion for Women

#### **Features:**

Safe Route Mapping – Suggests the safest paths using real-time data.

Live Location Sharing – Lets users share their location with trusted contacts.

**SOS Button** – Sends emergency alerts to contacts and authorities.

**Verified Transport – Connects users with** trusted ride options.

Community Safety Alerts - Crowdsourced reports on unsafe areas. This solution enhances safety and confidence for women traveling at night.



Phase 1 prototype

## Guardian Wearable - Smart Safety Device for Women

- •One-Tap SOS. Sends real-time alerts and location to contacts and authorities.
- •Voice Activation Triggers emergency help.
- Auto Recording Captures audio/video during distress.
- Vibration Alerts Vibrates to indicate safe or high-risk zones.



Phase 1 prototype (initial sketch)

Here at Samsung, a product could go through hundreds of prototypes before reaching the final product. However, it all starts with a simple sketch or model.





