Veethika is an Interaction Designer `@RedHat` who enjoys exploring the overlap of design systems and Open Source practices that could further enable the Open Source communities to perform without making any compromises.

Find her on:
`Twitter: @veethika`

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"Design thinking is a human-centred approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success."

— **Tim Brown, CEO of IDEO**

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Benefits of Design Thinking as an approach

Design thinking helps identify the problem and solve it

It utilises the diverse thinking within a group

Lets us evaluate and test the solution

How would a toolkit help?

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Prevent
bikeshedding

Shareable documented results

Best leverage diverse perspectives within the team

Provide a structure and framework for quick activities

Save time in devising a new process every time there's a need

Document and share the results with other communities

Bridge the gap between different open communities

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Why not the existing toolkits?

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Assumption to operate out of a common physical location

Dependence on 3M Post-its and difficulty in digital documentation

No proper system in place for customization of resources

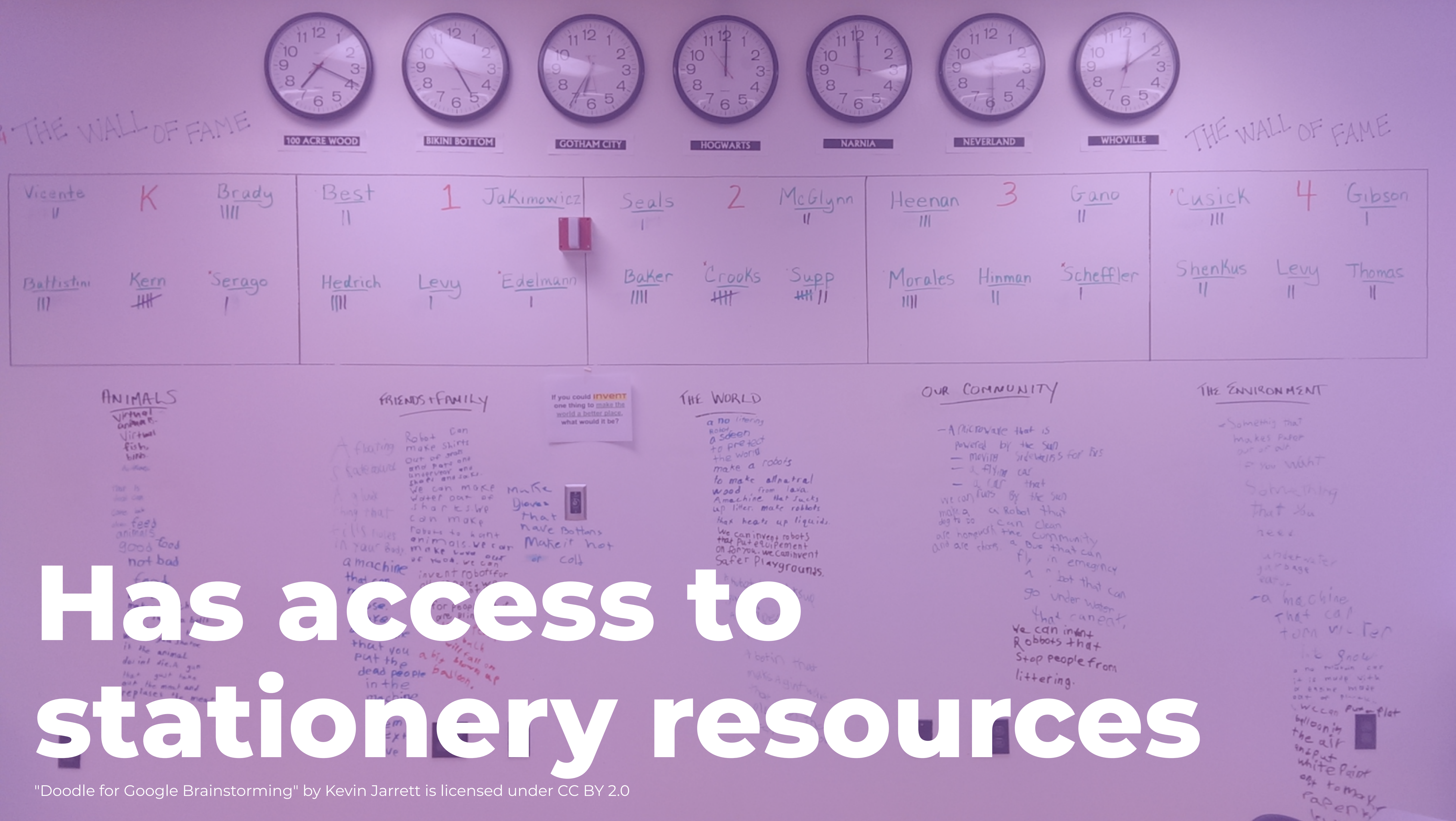**Does not encourage or ensure transparency**

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A regular team at work

Could meet-up anytime

Has access to stationery resources

Could conduct usability testing sessions

An open source community at work

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Most of the contributors
dog-food their products

Usually don't share a physical
location or even a time zone
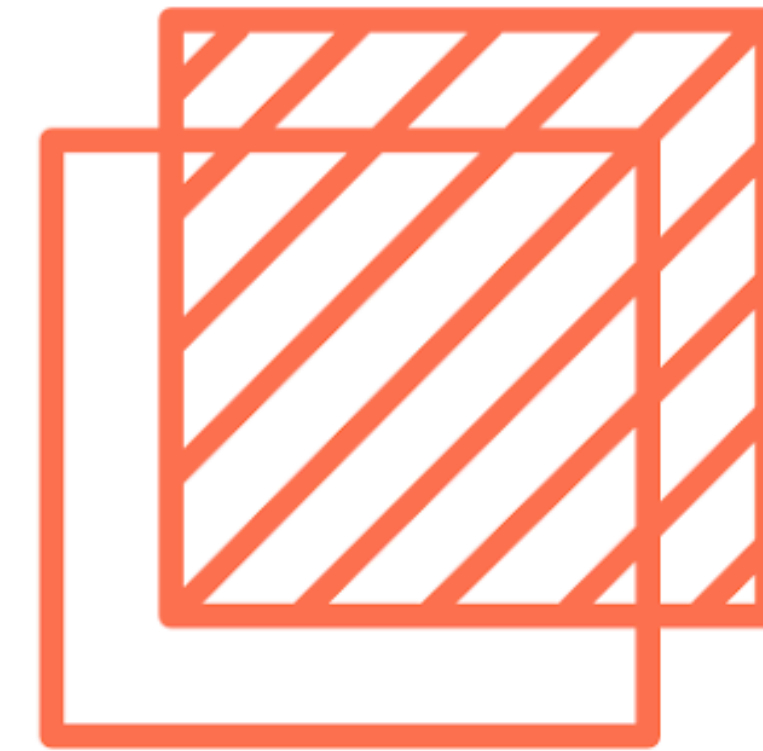
Put transparency and 'the
four essential freedoms' first

global by Dinosoft Labs from the Noun Project | transparent by Leif Michelsen from the Noun Project | Users by IconfactoryTeam from the Noun Project

The Process

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Standard Design Thinking Process
As defined by IDEO

@veethikaa

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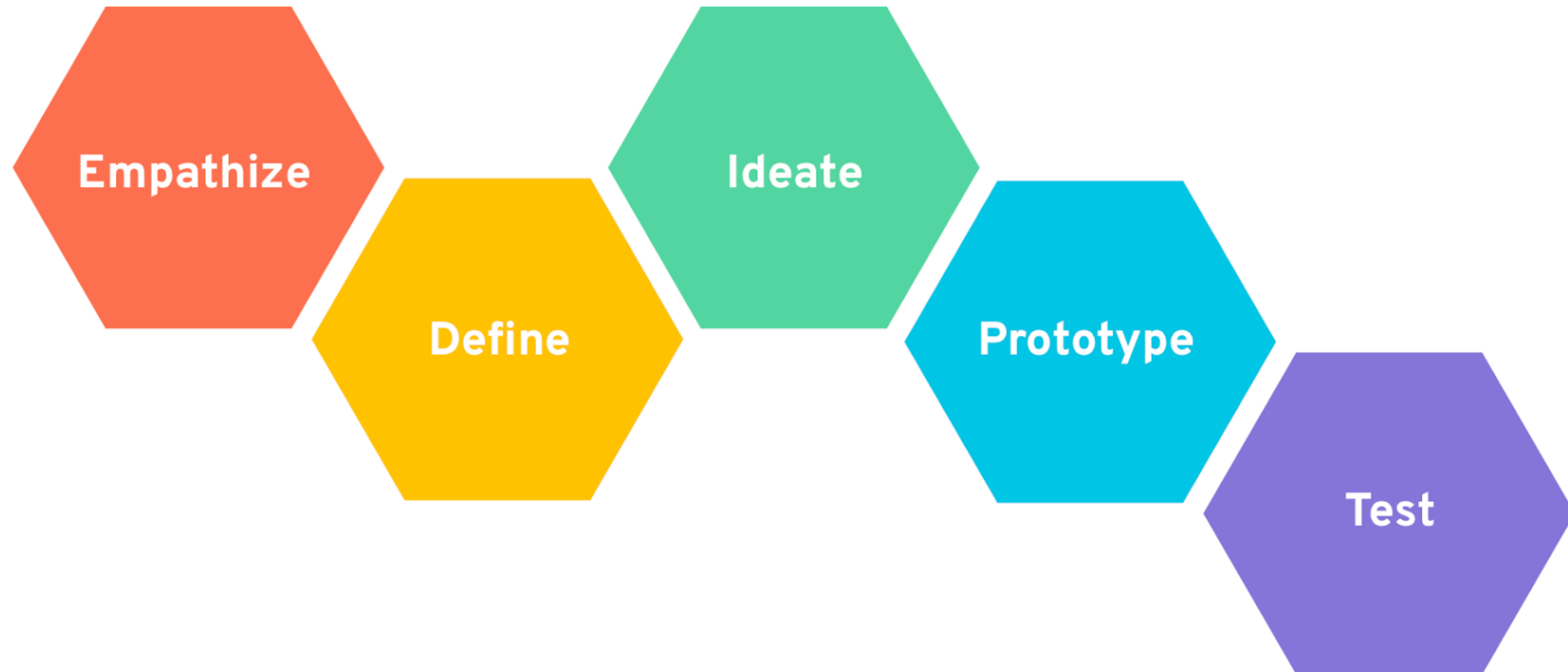
Modified For An Open Community

Identify Ideate Evaluate Execute

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When to use?

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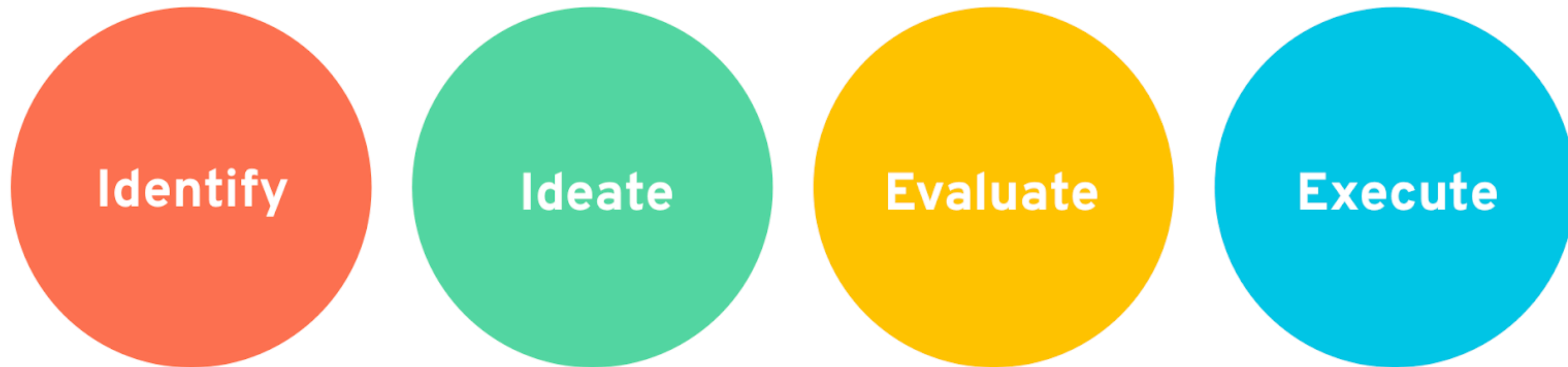
Defining requirements for a new project

Designing a new feature for the product

Resolving a usability problem

Looking for existing reports for quick validation of decisions

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Methodologies
And Frameworks

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Identify

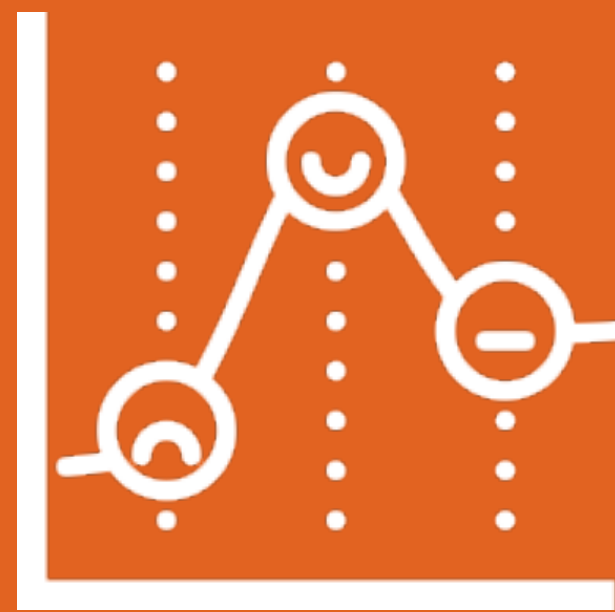Identify the opportunities by understanding the discomforts and challenges, and frame a problem statement. The group should together engage in activities that allow each participant to speak their mind and bring all the concerns and needs to the table. These could then be further voted and prioritised by the group.

Persona Generation

Scenario Mapping

Pain-points as Triggers

Put down points from your own every-day experience to construct a persona.

Define the two aspects of your persona's life that would be influenced by or would influence the product.
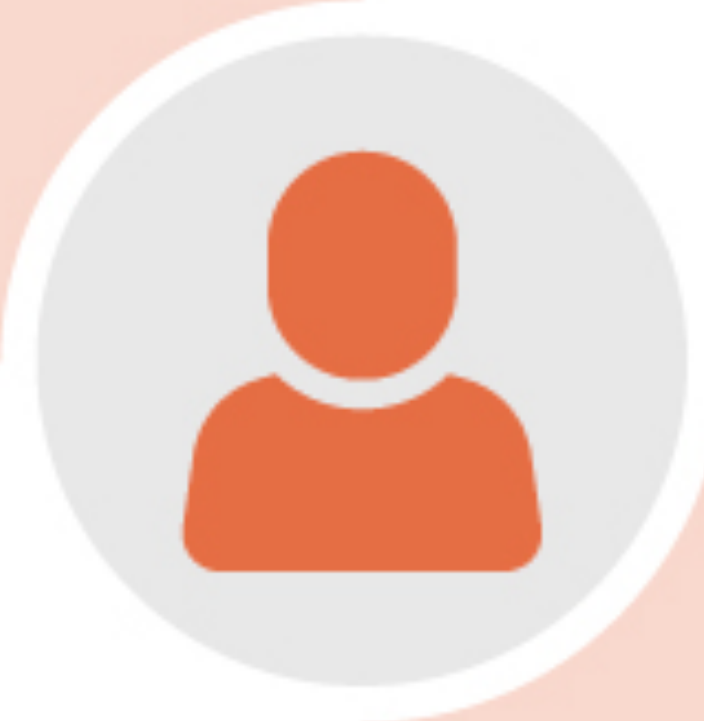Example, for a mobile payment app you could use the following persona:

• Electronic Device Usage Pattern
• Spending Pattern(Lifestyle)

Personal Background and Lifestyle

_____ starts their day with...

Weekend Plans

SCENARIO MAPPING

SCENARIO:

Delight/Criticality
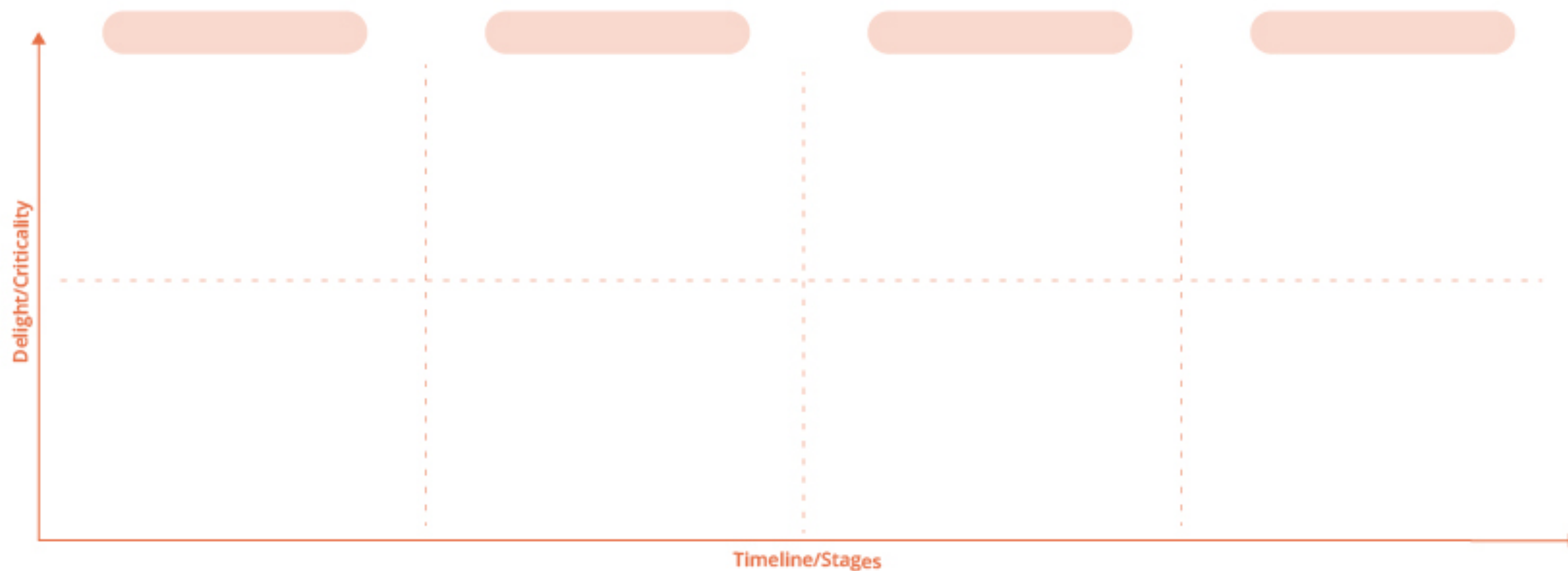
Timeline/Stages

Activity Cards

<Activity>

<Feeling>

Take the following card and place it on the graph to specify the activity that the user is engaged in, in relation to the timeline/stages. It is recommended to place all the activity on the horizontal middle line and then move them up or down discussing about their criticality.

Key Activities	Needs/Emotion Associated

PAIN POINTS PRIORITY MAPPING

Collect statements from the participants to cluster their pain-points

Pick any of the cards below, fill in the information and once everybody is done writing down their cards, segregate them into buckets. Size of the bucket would specify priority)

In an ideal world, <product> would...

<Product> should allow users...
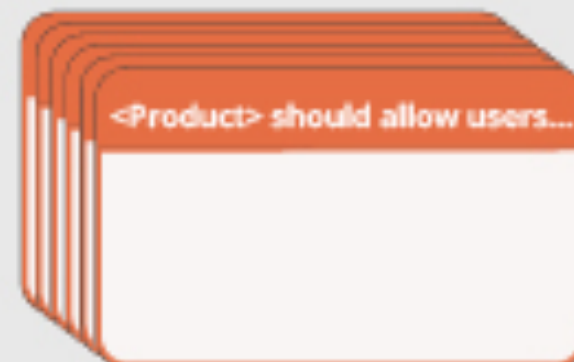
● Put this dot next to the idea you want to vote for

Park the undecided cards here:
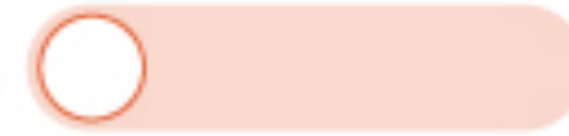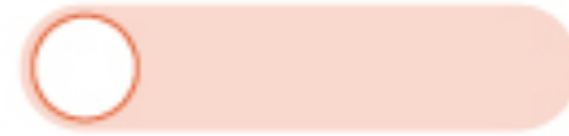
Ideate

From the shortlisted problem statements, pick one at a time and start building ideas around them. Mentioned methods provide the most efficient way to develop new ideas and build upon them without getting into a bike-shedding situation.

How do we...?

Stack-a-ring

In a parallel world

HOW DO WE...?

Convert the needs and pain-points into actionable questions

Use these Symbols to vote for the solutions towards the end to categorise them as Improvements and Features

I	F

Pick up top four needs or pain points from the previous exercises and write them below. Convert them into an actionable question by starting a s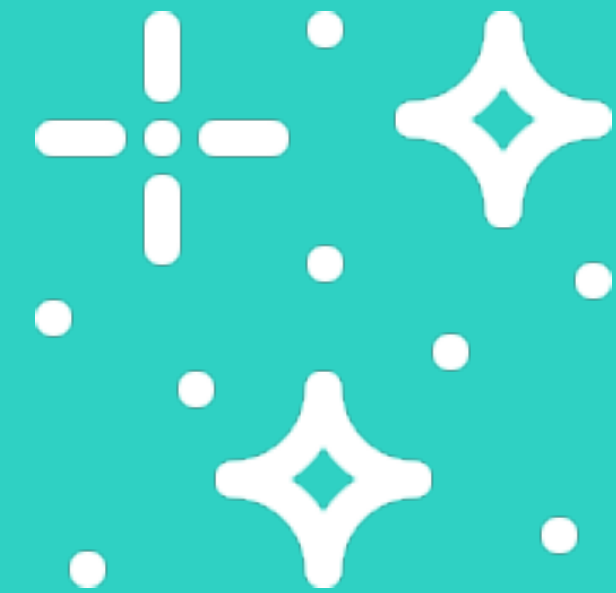entence with "How do we...". Then allow each participant to write an answer to the new question and provide an idea as a solution. Towards the end, the moderator tags each idea as an improvement or feature after discussing with the group.

Pain-point/Needs	Pain-point/Needs	Pain-point/Needs	Pain-point/Needs
How do we...	How do we...	How do we...	How do we...
Answers	Answers	Answers	Answers

STACK-A-RING

Develop further on the shorlisted features and improvements
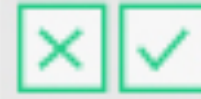
☒ ☑ **Use these symbols to vote for or against the ideas towards the end**

Start off with typing the solution to be developed further in the lowest box in each section. Divide the group into four parts and make them add further to one idea each group. After two round of putting down additions, define the final draft for the ideas to be worked on.

FINAL DRAFT

ADDITION 2:

ADDITION 1:

SOLUTION

FINAL DRAFT

ADDITION 2:

ADDITION 1:

SOLUTION

FINAL DRAFT

ADDITION 2:

ADDITION 1:

SOLUTION

FINAL DRAFT

ADDITION 2:

ADDITION 1:

SOLUTION

IN A PARALLEL WORLD

Take chances at finding out the mos radical way of implementing ideas

Write down the idea on the top band of each card. In the lower band start off the sentence with "In a parallel world..." and provide a radical way for the implementaion of the same idea or a close to fantasy version of it. It would surprise how sometime what we think of as impossible is brought to life when discussed with the fellow magicians.

<Type the ideas here>

In a parallel world...
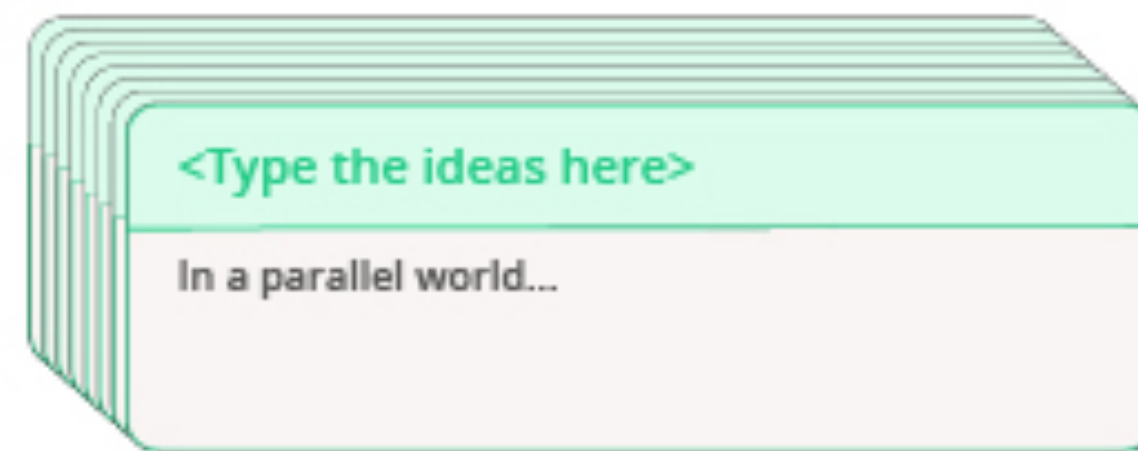
MOVE TECHNOLOGICALLY FEASiBLE IDEAS HERE

Evaluate

The outcomes of the ideation process needs to be primarily evaluated in terms of time and effort required, since open source communities are a group of volunteers.
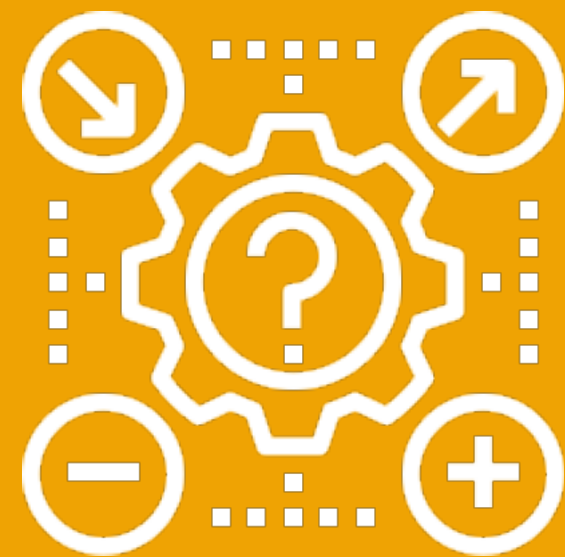
Feasibility Evaluation

Heuristic Evaluation

FEASIBILITY EVALUATION

Evaluate the ideas in terms of time needed, tech feasibility and ranking with competitor products
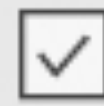
☑ USE THIS SYMBOL TO VISUALISE YES VOTE FOR THE MATCHING CRITERIA IN TABLE

List down the ideas in the left hand side section of the table, then evaluate each one of them in terms of how much time would it take for implementation? Is the technology ready for it? And would it provide an edge over the competitors?

IDEA	TECH FEASIBILITY	PRACTICAL TIMELINE	EDGE OVER COMPETITORS
	☑		
		☑	

HEURISTICS EVALUATION

Evaluate the ideas against th heuristics principles

☑ USE THIS SYMBOL TO VISUALISE YES VOTE FOR THE MATCHING CRITERIA IN TABLE

Read the list of 10 heuristics principles. Then write down the idea to be evaluated on the left side of the table. Discuss with the group if the idea complies with the principles. If yes, put a tick mark next to it, else list down the changes to be made to the idea to make it through these principles.

1. VISIBILITY OF SYSTEM STATUS
(Give clear indication of whats happening)

2. MATCH BETWEEN SYSTEM AND THE REAL WORLD
(Is the concept familiar to the user?)

3. USER CONTROL AND FREEDOM
(Does the user have enough control to undo a mistake and do things freely?)

4. CONSISTENCY AND STANDARDS
(Consistent with general behaviour?)

5. ERROR PREVENTION
(Prevent the user from making a mistake)

6. RECOGNITION RATHER THAN RECALL
(Its easier to recognise than to recall from memory. Give upfront suggestions)

7. FLEXIBILITY AND EFFICIENCY OF USE
(Is it flexible to the user's changing expertise and requirements?)

8. AESTHETIC AND MINIMALIST DESIGN
(Is it flexible to the user's changing expertise and requirements?)

9. HELP USERS RECOGNIZE, DIAGNOSE, AND RECOVER FROM ERRORS
(Communicate better)

9. HELP USERS RECOGNIZE, DIAGNOSE, AND RECOVER FROM ERRORS
(Communicate better)

10. HELP AND DOCUMENTATION
(Help them through)

IDEA	HEURISTICS COMPLIANCE

Execute

The final stage is to implement the ideas. To understand the course of development it's important to break it down into actionable bits and plan along.

Entry to Exit

Wireframes

ENTRY TO EXIT

Define each step from the onboarding to exiting the application/Feature

Imagine a scenario of a user onboarding to the app/feature and starting off their journey. Discuss the journey elaborately to understand every possible step the user might take in the process.

ONBOARDING	Define intermediate stages	EXIT

Action Cards

<Action>

Interface element

Take the following card and place it on the journey map to specify the action taken by the user. After placing the action, note down which unique interface lement would be needed to enable that action. The list of UI elements from here could be very helpful while creating the concept wireframes.
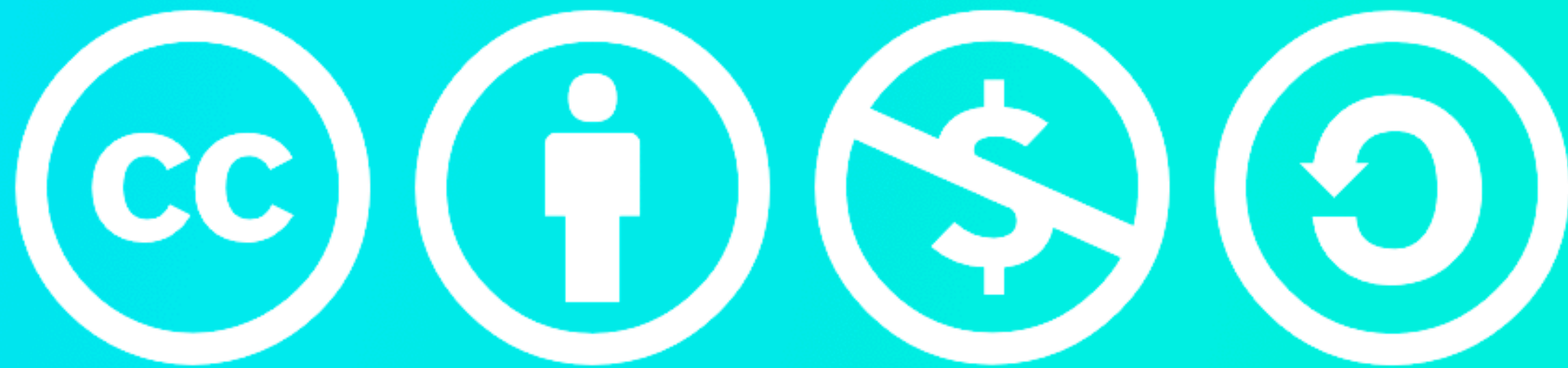
Activities	Unique Interface Element Associated

Tools To Be Used?

The wheel does not need to be reinvented

License

Users should be free to share, remix and reuse the toolkit resources

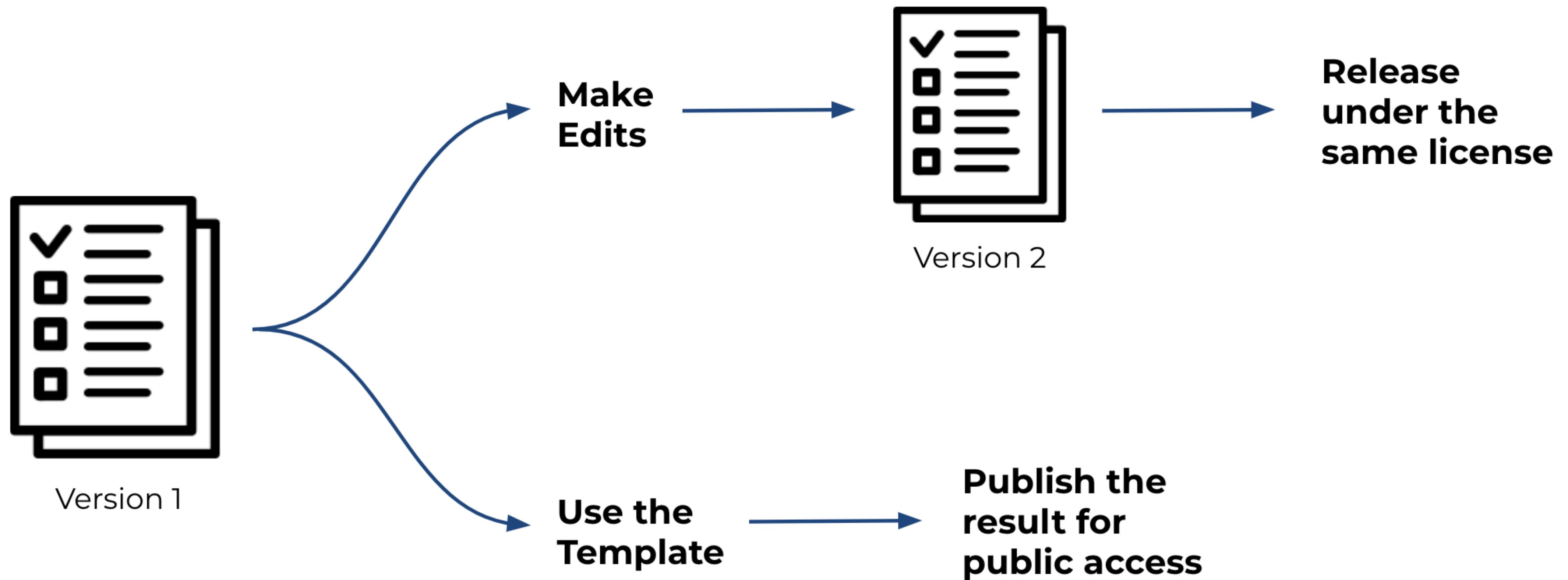Attribution NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)

Allow users to create their own custom version of process templates

Doesn't let them commercially exploit the efforts of other community members

Can be easily edited, shared and remixed

Would provide a wider reach and hence richer contribution for the toolkit

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How to use the templates and collaborate?

Make
Edits

Version 2

Release
under the
same license

Version 1

Use the
Template

Publish the
result for
public access

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