Open Design Toolkit
A collection of frameworks and methodologies to facilitate innovation in open communities

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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.

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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
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?
Prevent bikeshedding

"Brainstorm ABDI" by Vitor Pamplona is licensed under CC BY 2.0
Shareable documented results

"#Sharing: Friday night pizza" by Jeremy Segrott is licensed under CC BY 2.0
Best leverage diverse perspectives within the team
<table>
<thead>
<tr>
<th>Provide a structure and framework for quick activities</th>
<th>Save time in devising a new process every time there’s a need</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document and share the results with other communities</td>
<td>Bridge the gap between different open communities</td>
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</table>
Why not the existing toolkits?
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
A regular team at work
Could meet-up anytime
Has access to stationery resources
Could conduct usability testing sessions

"Chandler Usability Testing" by Eugene Kim is licensed under CC BY 2.0
An open source community at work
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
The Process
Standard Design Thinking Process
As defined by IDEO

- Empathize
- Define
- Ideate
-Prototype
- Test
Modified For An Open Community

- Identify
- Ideate
- Evaluate
- Execute
When to use?
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

@veethikaa
Methodologies And Frameworks
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.
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)
SCENARIO MAPPING

Define a scenario for the person to live through.

Activity Cards

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.
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.

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

Question by Shital Patel from the Noun Project | Toy ring stacker by Creatica Creative Agency from the Noun Project | magic by Schmidt Sergey from the Noun Project
<table>
<thead>
<tr>
<th>Pain-point/Needs</th>
<th>How do we...</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
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**Use these Symbols to vote for the solutions towards the end to categorise them as Improvements and Features**

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 sentence 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.
Stack-A-Ring

Develop further on the shortlisted features and improvements

<table>
<thead>
<tr>
<th>FINAL DRAFT</th>
<th>FINAL DRAFT</th>
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<tbody>
<tr>
<td>ADDITION 2:</td>
<td>ADDITION 2:</td>
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<td>ADDITION 1:</td>
<td>ADDITION 1:</td>
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<tr>
<td>SOLUTION</td>
<td>SOLUTION</td>
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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 rounds of putting down additions, define the final draft for the ideas to be worked on.
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 implementation 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.
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

probability by Nithinan Tatah from the Noun Project   |   Heuristic evaluation by Yu luck from the Noun Project
## Feasibility Evaluation

Evaluate the ideas in terms of time needed, tech feasibility and ranking with competitor products.

<table>
<thead>
<tr>
<th>IDEA</th>
<th>TECH FEASIBILITY</th>
<th>PRACTICAL TIMELINE</th>
<th>EDGE OVER COMPETITORS</th>
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<tbody>
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**HEURISTICS EVALUATION**

Evaluate the ideas against the heuristics principles.

**1. VISIBILITY OF SYSTEM STATUS**
(Give clear indication of what's 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**
(Part of the user from making a mistake)

**6. RECOGNITION RATHER THAN RECALL**
(To easier to recognize than to recall from memory. Give upfront suggestions)

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

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

**9. HELP USERSrecognize, Diagnose, and Recover from Errors**
(Communicate better)

**10. HELP DOCUMENTATION**
(Help them through)

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**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.

<table>
<thead>
<tr>
<th>IDEA</th>
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<table>
<thead>
<tr>
<th>HEURISTICS COMPLIANCE</th>
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(Additional details about the principles can be provided as needed.)
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.
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.

**Actions**

**Interface Elements**

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 element would be needed to enable that action. The list of UI elements from here could be very helpful while creating the concept wireframes.
The wheel does not need to be reinvented
Users should be free to share, remix and reuse the toolkit resources.
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
How to use the templates and collaborate?

1. Version 1
2. Use the Template
3. Make Edits
4. Version 2
5. Publish the result for public access
6. Release under the same license