

# Understand



# 1

goal: gather, observe, and research available information to find the needs of the user

artifacts: design requirements

## 1) identify the challenge & users

generate

think big! what is the problem? who is affected by it? what is known/unknown? orient yourself with all of the project's who, what, why, when, & how.

Better visualisation of the cryptocurrencies and transaction between them.



## 2) find questions & tasks

what can you ask about the challenge? what do users want to do with data? think high and low level, revisit this worksheet to break these down further.

Is there a better way to present it than an excel table? Can we efficiently customize an analysis? How do we know that it is efficient?

!! box #3 may help you revisit this box later



## 3) check with users or explore data

users: what did you find out? what sparked curiosity? data: characterize aspects of the data what is it like?

didn't have contact with users.

if contains 100 coins, coins-to-usd exchange, volume2b between coins.

!! get the real data and talk to real users if possible!



## 4) brainstorm design requirements

what are recurring trends? what are key design opportunities? are there constraints worth listing?

- Graph } designs  
- Heatmap }

- Too many transactions } concerns  
- Too many nodes for fluid analysis }



## 5) compare and rank design requirements

evaluate

choose a method for comparison: pros/cons table, rank based on your findings/user needs/tasks, cross out the list based on listed justifications, or pick top 3 to keep and why. explain and review with a group or partner.

!! is this the right challenge to tackle? is there enough detail? or too much? too many or not enough requirements? complete this worksheet again to refocus the project.



# Ideate



# 2

goal: generate good concepts and ideas for supporting some of the project's design requirements

artifacts: ideas & sketches

## 1) select a design requirement

generate

how might we address the challenge using the requirement? which questions would a user ask? revisit this worksheet for each important design requirement.

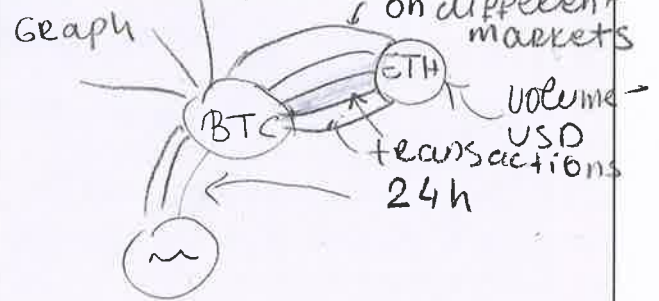
Can I compare transactions without switching tabs?  
How much times does it takes to use it?

!! revisit this worksheet for all important design requirements for your project



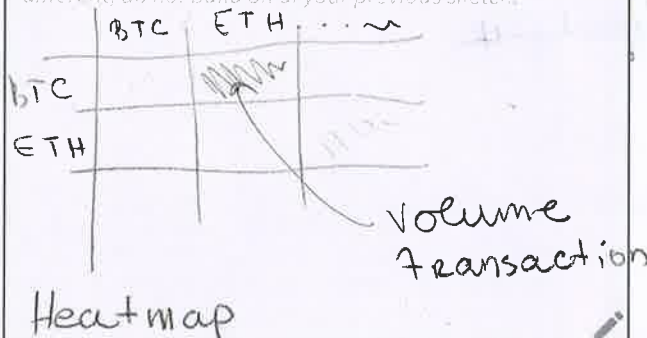
## 2) sketch first idea

show how to address this requirement using an informal sketch - focus on the big idea not the details



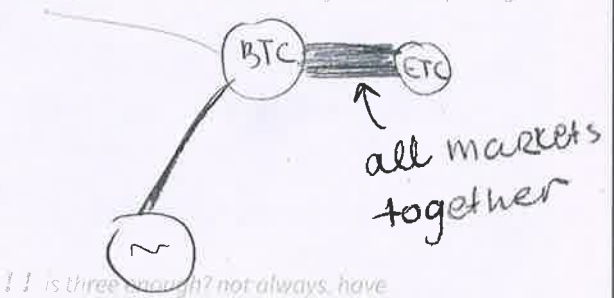
## 3) sketch another idea

try another sketch, think of a new perspective, be different, do not build off of your previous sketch.



## 4) sketch a final idea

think of a different abstraction, challenge constraints and assumptions to draw something new or surprising.



!! is three enough? not always, have other ideas? fill out another worksheet!

## 5) compare and relate your ideas

evaluate

for each sketch, break apart what works well (+) and what doesn't (-) in the table below. make connections. reflect on best parts. can you combine ideas? review the table with a partner or group.

	sketch #1	sketch #2	sketch #3
-	Too many links, difficult to interact	The heatmap is almost empty	losing information about markets
+	All the information is on the graph.	Dont have to deal with intersecting links	The graph is much cleaner
+			The size of the link keeps the information for total transactions

!! combining ideas and sketches is not easy. sometimes it may open up new possibilities and ideas - guess what, ideate again!



# Make



# 3

goal: concretize ideas into tangible prototypes which are approximations of a product in some aspects

artifacts: prototypes

## 1) set an achievable goal

generate

what should the prototype **achieve**? what are the specific **criteria for success**? break a larger goal into parts with clearer feature sets.

- Summarize a lot of info in one graph
- Easier treatment of information
- make a graph with a lot of data easy to use

!! break a goal apart into multiple and create a worksheet for each sub-goal

## 2) plan encodings & layouts

what are good visualization **encodings** or **layouts** for which data? use the ideas you just came up with, and **remember** to justify for users **and** their tasks.

Website, will be easily accessible.

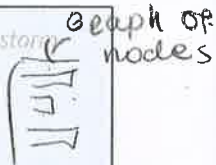
## 3) plan support for interactions

what can the user **do**? what is required given the chosen encodings? **justify your design** decisions.

- The user will have the possibility to create and analyze its own network of coins.
- By selecting a coin it will be placed on a hist. for comparison
- Same for link

## 4) sketching additional views

what parts of the data must be seen? brainstorm how to show this data in the tool.



Graph of lines (volume of exchange)



## 5) build the prototype and check-in

evaluate

are your **goals met** by the prototype? test with users if possible. are design decisions properly justified? do any need to be revisited? were any new constraints or limitations discovered? write down your progress and additional justifications below. review this progress and the prototype with a partner or your group.

Didn't have the opportunity to test with users yet.

!! did the prototype meet its goal/s? measure its success. make sure you have addressed the design requirement, does the prototype try to do too much?





# Deploy



goal: bring a prototype into effective action in order to support real world users' work & goals

artifacts: visualization system

## 1) pinpoint a target audience

generate

who are you deploying to? what are their goals? what will qualify this deployment as a success?

People inveisting in /or interested in cryptocurren-  
cies.

!! does this audience match your users back on the Understand sheet? if-not, revisil previous sheets!



## 2) fix usability concerns

can the tool be easier to use? what elements & interactions can be twoked to avoid frustration?

The visualisation is all about good visualisation. One focus is on making the analysis of cryptocurrencies trivial.

!! is this a new kind of interaction? should you ideate on the idea here instead?



## 3) improve points of integration

Integrate data/tools. maximize algorithmic or storage efficiency. how does this fit in a user's workflow?

setup backend for data scraping: No wait time for data scraping when loading the page!



## 4) refine the aesthetics

is the use of color and typography consistent? what about the layout or use of whitespace? make it look pleasing!

It is important. We plan to focus on that.



## 5) consider a method to evaluate your system

evaluate

take a look at the provided supplement of possible methods. how would you test your system? what would be a successful test of this system? write an evaluation plan here. talk through this plan with a partner or your group if you have time. test with one or more users. summarize your findings, insights, and recommendations below.

!! did any of the usability, integration, or aesthetic changes result in new ideas or requirements? revisit earlier worksheets as needed!



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