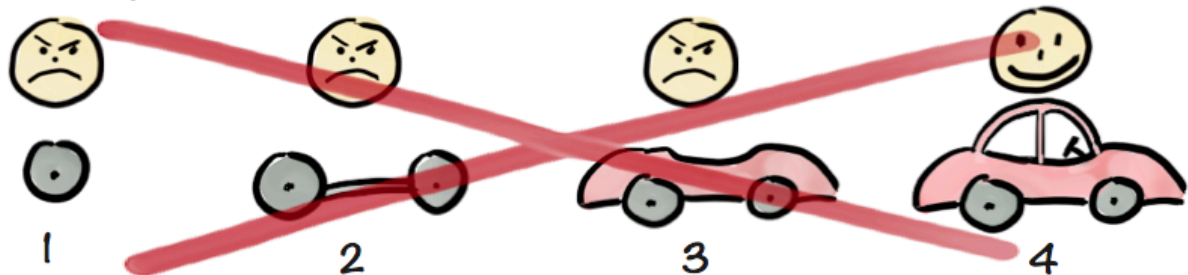


Minimum Viable Product (MVP)

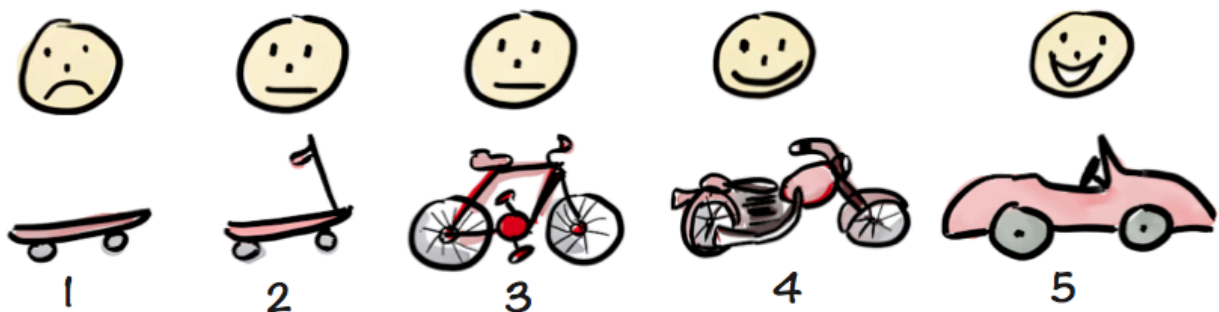
Principles of Geocomputing

A Minimum Viable Product (MVP) is a lightweight early version of a project. It is literally the simplest thing you can create that demonstrates an idea could work and could solve the problem. For many Geocomputing projects, that could simply be reading a portion of your data (a small study area), applying the most basic analytical method, plotting one chart, and closing the dataset. A graphical way to understand the MVP was illustrated by Henrik Knibergt.

Not like this....



Like this!



Henrik Kniberg

Image credit and further explanation:

<https://blog.crisp.se/2016/01/25/henrikkniberg/making-sense-of-mvp>

In this deliverable, you will submit your MVP Design Framework and a Jupyter Notebook that represents a Minimum Viable Product (MVP). Show us "the skateboard version" of moving people (following the illustration above) rather than just the wheel of a car.

Your notebook should have:

- 1) Markdown cell at the top with a title (#) and a description of your project
- 2) One code cell that imports the packages your notebook needs to run
- 3) Some additional code cells that serve as your MVP.
- 4) A Markdown cell at the bottom of the notebook with one paragraph that explains why this notebook represents a MVP of your project.

Your MVP Design Framework should provide an overview of your MVP and a "Spec list" a list of your top 7 features with the Value of that feature (High, Medium, Low) and the amount of Effort it would take to implement that feature (High, Medium, Low). When thinking about which features or capabilities you should include in your MVP, you want to target High Value, Low Effort ones.

More explanation:

(Warning related to language in the videos, but these two videos explain the purpose and design process for creating an MVP quite well)

- Michael Seibel - How to Plan an MVP
<https://www.youtube.com/watch?v=1hHMwLxN6EM>
- Making sense of MVP (Minimum Viable Product)
<https://www.youtube.com/watch?v=OP7nCmln7PM>

Even more explanation:

Determining the viability of an MVP requires examining its core functionality and its ability to solve a very targeted problem. An MVP is deliberately constructed with the minimum set of features necessary to validate the concept. Rather than building a fully-featured product from the outset, which can be resource-intensive and risky, the MVP approach allows you to iterate based on feedback and experience. Once the initial concept is proven viable, additional features can be incrementally added, refining the product and ensuring it aligns with the problem it is trying to solve. If MVP development continues, then over time, the MVP evolves, transforming from a basic prototype into a more robust and sophisticated product - a Project. This iterative process minimizes wasted effort and increases the chances of developing a successful project.

Your key question to answer is:

Is it viable?



Grading Rubric

The following rubric will be used to grade this MVP exercise. Minimum Viable Products are graded based on two categories. You must receive "Competent" to receive points in a category. In other words, you must show competency to receive credit for the work. MVPs focus on demonstrating technique and quality to encourage students to stretch their abilities.

	Unsatisfactory	Competent
Technique & Concept	Work reflects a limited understanding of skills, concepts, and materials.	Work reflects a proficient understanding of skills, concepts, and materials.
Quality	Work is messy and lack of quality detracts from overall presentation.	Work is neat and presentation is solid showing thoughtfulness.

5 points will be awarded if the MVP is graded at the "Competent" level for both "Technique & Concept" and "Quality." MVP exercises are graded holistically for each category.

	Unsatisfactory	Competent
Technique & Concept	0 points	4 points
Quality	0 points	1 point