

**CMPSC 580
Junior Seminar
Spring 2019**

**Assignment 4:
Feasibility of an Idea
GoogleDocs for Submission**

Starter Link for Google Docs

<https://goo.gl/forms/4U9T6Ru8Ih0NmzXV2>

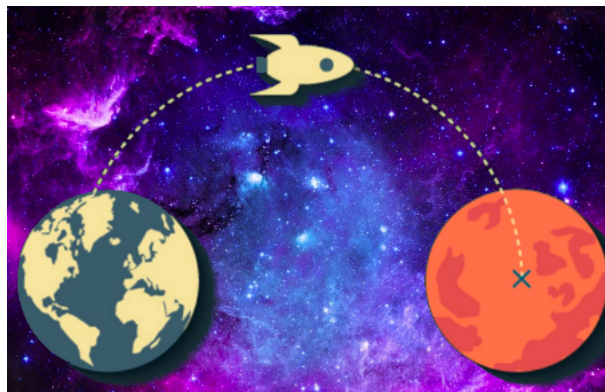


Figure 1: Traveling through space to Mars is actually quite complicated due to many extra steps that must be completed properly.

Part 1: Ideas from Articles, Feasibility

In last week's assignment, you were to study the literature of your interest-area and present on the types of resources which are necessary for using selected ideas from articles. In this week's assignment, you are to consider the feasibility of incorporating an idea into your own work.

The website, *dictionary.com*, defines “feasibility” as, *the state or degree of being easily or conveniently done*. For instance, long before its take-off, the *feasibility* (or the convenience of completing the necessary tasks) of a manned flight to Mars must be considered. Without solving some of these smaller tasks, the ideas to make space-flight possible as shown in Figure 1 cannot be realized. To make the idea of space-travel possible, engineers were forced to determine whether the steps involved in executing an idea (to build a craft for space-flight and interplanetary travel) were even possible to complete, using their available resources (i.e., time, money, building materials, hardware, software, and others.) Luckily, once the shuttle has been built (and is safe for flight), there are many books around to help us decide how best to make the trip to other planets such as the one of 2.

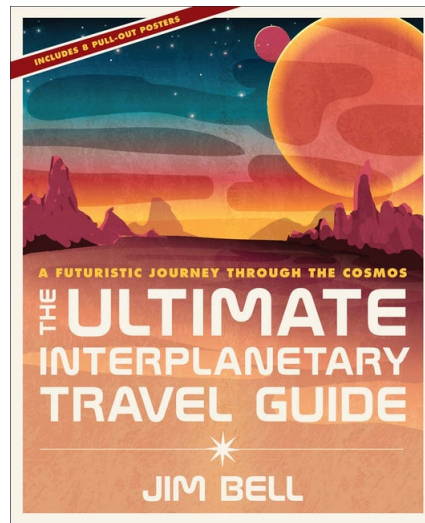


Figure 2: A book about how to undergo an interplanetary trip by Jim Bell. Reference: <https://www.sterlingpublishing.com/9781454925682/>

How will you get your idea to fly?

Ideas may be found in research articles. After locating an idea, one quickly finds that there is more than just the idea (itself) to implement. Instead, there are the associated resources to consider (i.e., algorithms, software tools, data requirements, financial investment and others) that must first be in place for the idea to be used. In your literature research, you have likely found many ideas that you liked for your research. Here, we aim to determine if an idea is a good fit for your work, by studying its initial steps to complete before its implementation.

What to do

In this assignment, we are discussing the feasibility of an idea, as a function of the necessary resources to apply it. Here, you will answer some leading questions using a Google Form to help you in your consideration of the idea. In this assignment, you are to describe a idea that you found important to your research (in some meaningful way). Here, you will comment on the feasibility of using the idea (following the investigator's original work) in your own work. Ask yourself whether you have all the required resources available to use the idea. Although a benefit to your work, is this idea actually *feasible* for your work due to resources (i.e., time, data, money, etc.) that you may need before you can use it?

Questions in the Google Form to Address

If needed, go online to sites that offer articles to read from your interest area such as scholar.google.com to type a general keyword from your interest area. Look through the articles to get more ideas. Keep a note of these ideas for when you complete your leading questions in the Google Docs form (using the link provided above).

In your Google form, your questions will be the following.

1. For a chosen idea

- (a) In brief yet detailed discussion, describe an idea from an article that you liked.
- (b) What were the top three resources that the investigators had to use to implement this idea in their work? (You may need to make educated guesses about these resources.)
- (c) How were these resources employed in the project and by whom?
- (d) How feasible is this idea for your work? What resources do you have and not have to implement this idea? How could you change the idea to be able to reach a resource that may not have immediately available to you?

In the next part, you will be introducing a presentation over what and how the resources were used to enable one of the two ideas.

Part 2: Lightning Talk and Slides

Feasibility of an idea is important and must be considered before adopting the idea. In this lightning talk, you are to consider some of the advantages and disadvantages of ideas requiring extra (unforeseen) steps to initiate.

What To Do

For our next class, prepare a “lightning talk”, lasting about 3–5 minutes, together with several accompanying slides (written in a software of your choice), in which you respond to the below questions.

- 1. What is an idea that you got from an article?
- 2. What are some of the resources that the authors used to implement the idea?
- 3. How could you implement this idea for your own research? What kinds of resources do you anticipate requiring to implement the idea?

Help?

Please let the instructor know of any questions that you may have. Please use email or make office-hour appointment slots if you would like to discuss an issue.