

# Growth Analyst: Skills Assessment

## Background

Springboard would like to experiment with different payment options to determine which ones lead to highest student completion (and retention). There are two payment options under consideration:

1. **Upfront:** The student pays upfront for most or all of the course in return for a discount
2. **Subscription:** The student pays month-to-month for as long as they take to complete the course, with an option to cancel at any time

Our courses typically have two structures:

1. **Fixed-length:** Students have to finish the course in a fixed amount of time
2. **Self-paced:** Students can take as long as they like, and pay as they go

We have run a few different experiments in the past and have collected data around 3 of our courses. Here's some context about each of these courses.

Course	Type	Option available from	Default	Description
DAB	Fixed-length	Jan 2, 2017	Upfront	pay upfront for 3 months (10% discount)
DS2	Self-paced	Jan 30, 2017	Subscription	pay upfront for 3 months (20% discount)
DSC	Self-paced	Jan 2, 2017	Subscription	pay upfront for 6 months (20% discount)

The *Option available from* column indicates the cohort for which both payment options were available. We have cohorts starting approximately every month.

## Challenge

[This spreadsheet](#) contains the data we collected over a few months for each of these courses. Your task is to use this data to recommend to Springboard which payment option (if any) is the better one. Here are some questions to help you guide your analysis:

- A. Do you have any hypotheses around why the choice of payment option (upfront or subscription) should be correlated to completion rates?
- B. Can you summarize and visualize the data in a compact manner, preferably in as few charts as possible?
- C. Can you draw any conclusions around whether one option is better than the other? Does the course structure play a role?
- D. What recommendations would you make to Springboard as a business?
- E. What are some questions you'd want to explore further or experiments that you'd recommend that Springboard runs?

## Deliverables

- 1. A short slide deck (fewer than 10 slides) summarizing your analysis
- 2. Your actual analysis (spreadsheet, code, etc). You can use any tools or languages of your choice.

*Please treat this assignment as if you were a colleague, and feel free to email me any questions to validate your assumptions. Please state any assumptions you make clearly in your submission.*