**Case Study 6.1 - Instructions: NYC Taxi Trips**

 Bookmark this page

APPLY icon - Peer-Reviewed Graded Activity

**Solve a Case Study and Assess your Peers**

* **Instructor:** Kalyan Veeramachaneni
* **★ Activity Type:**  Graded Activity
* **Case Study Description:**To predict the trip duration of a new york taxi cab ride, build different types of features and evaluate them. We will start by describing what is a feature in this context; then we will develop some elementary features and will add features using the software package featuretools. We will assess how these features perform in predicting trip duration
* **Datasets and format**: Multiple .csv files, loaded as pandas data frames
* **Tools used?**: [Featuretools](https://github.com/Featuretools/DSx" \t "[object Object]) (Deep feature synthesis)
* **Why this Case Study?**By following this case study steps, you can develop a trip predicting tool based on different types of features.

**Instructions to Complete This Activity**

**Download and read Self-Help Documentation, Zip File, and Activity Template**

* Step A. Download the Self-help documentation document, we walk through some helpful tips to get you started with building a predictive model to estimate the duration of NYC taxi rides. In this tutorial, we provide examples and some pseudo-code Python. [Download the CS data](https://s3.amazonaws.com/mit-dsx-data/nyc-taxi-data.zip).
* Step B. Before you start solving the case study, read the "Activity Template" and "[Evaluation Rubric](https://prod-edxapp.edx-cdn.org/assets/courseware/v1/41a0f615acc56ed55cef379400feecb8/asset-v1:MITxPRO+DSx+3T2017+type@asset+block/6_1_Rubric.pdf)" carefully so that you can successfully complete this activity.
* Step C. In the next tab, you will submit a filled "Activity Template" copy as a .pptx or .pdf file. Before you submit it, rename it as "YourLastName\_FirstName\_CS\_6.pdf" or "YourLastName\_FirstName\_CS\_6.pptx". *Due date> Friday, December 15, 23.30 UTC.*
* Step D. As soon as the system receives a number of submissions, it will automatically assign you two activities from your peers for your review. *Due date> Sunday, December 17, 23.30 UTC. \*****Submit both peer reviews in the same session****(otherwise, the system will not save the information).*

(\*Remember to convert UTC to your local time to avoid missing the submission deadlines.)

|  |  |  |
| --- | --- | --- |
| [**Download Self-Help Documentation**](https://mitxpro.mit.edu/assets/courseware/v1/c13d4c46fdaaeac3f39cfb1817742370/asset-v1:MITxPRO+DSx+3T2017+type@asset+block/M6_CS6_1.pdf) | [**Download CS files**](https://mitxpro.mit.edu/assets/courseware/v1/a4d7302e81b8d57f505c644e7941edca/asset-v1:MITxPRO+DSx+3T2017+type@asset+block/DSx_CS6.zip)[**.zip folder**](https://mitxpro.mit.edu/assets/courseware/v1/a4d7302e81b8d57f505c644e7941edca/asset-v1:MITxPRO+DSx+3T2017+type@asset+block/DSx_CS6.zip) | [**Download Activity Template**](https://mitxpro.mit.edu/assets/courseware/v1/d1cd15e7a8563cfa2cb71897644db9de/asset-v1:MITxPRO+DSx+3T2017+type@asset+block/Case_Study_6_1.pptx) |
| [https://prod-edxapp.edx-cdn.org/assets/courseware/v1/728f99b86d5ae6890f2492b484cc53c4/asset-v1:MITxPRO+DSx+3T2017+type@asset+block/DOWNLOADdocumetation.png](https://mitxpro.mit.edu/assets/courseware/v1/c13d4c46fdaaeac3f39cfb1817742370/asset-v1:MITxPRO+DSx+3T2017+type@asset+block/M6_CS6_1.pdf) | [https://prod-edxapp.edx-cdn.org/assets/courseware/v1/04dd77e770bc9aa07b468accb394c82d/asset-v1:MITxPRO+DSx+3T2017+type@asset+block/Code-Window-icon.png](https://mitxpro.mit.edu/assets/courseware/v1/a4d7302e81b8d57f505c644e7941edca/asset-v1:MITxPRO+DSx+3T2017+type@asset+block/DSx_CS6.zip) | [https://prod-edxapp.edx-cdn.org/assets/courseware/v1/9ff3a5fc0a91b28159cdaf135e8be7e5/asset-v1:MITxPRO+DSx+3T2017+type@asset+block/template.png](https://mitxpro.mit.edu/assets/courseware/v1/d1cd15e7a8563cfa2cb71897644db9de/asset-v1:MITxPRO+DSx+3T2017+type@asset+block/Case_Study_6_1.pptx) |
|  |  |  |

**Time Required**

* Individual submission> The time required to do this activity varies depending on your experience in the required programming background. We suggest planning somewhere between 2 & 3 hours.
* Peer review> You need time to go over the activity submitted by two peers. We recommend you plan 10-15 minutes per activity.

**Have questions?**

Since this is a graded peer-reviewed activity, we encourage you to discuss the case study with other participants in the [**Discussion Forum**](https://preview.edx.org/courses/course-v1:MITxPRO+DSx+3T2017/discussion/forum/)under Module 6 Case Studies.

There is also a [Gitter](https://gitter.im/featuretools/Lobby" \t "[object Object]) for Featuretools, a chat room for questions related to the software. You will need to sign in with either a Github or Twitter account.