

# Grab Marketplace and Business Intelligence Analyst Take-home Analysis Task

## Instructions:

You have **three** hours from receiving this assignment to complete the task below and return your completed work. At the end of three hours, please submit your analysis output including any notebooks, slides, visuals, and code back to **[insert email]**

## Dataset description:

The attached dummy dataset describes GrabTukTuk bookings attempted in Phnom Penh on a Tuesday. Each row indicates a booking attempt made by a passenger. After a booking is made, the booking is then broadcast to potentially available drivers in a nearby area, drivers can elect to accept or ignore that booking.

Once a booking is ignored by driver, the booking will continue to be broadcasted to other available drivers until a driver accepts it.

Once a booking is accepted, the booking can subsequently either be completed, cancelled by passenger or cancelled by driver.

## Variables:

- **hour\_local** the hour when the booking is created, in international time format (15 means 3pm)
- **pickup\_area** the area where the passenger expects to be picked up
- **dropoff\_area** the area where the passenger expects to be dropped off
- **booking\_state** the final status of a booking, it is either successfully completed or cancelled by passenger or cancelled by driver
- **driver\_incentive\_khr** the bonus amount of money (in KHR) offered to driver if driver completes the booking
- **trip\_distance\_km** the entire distance (in KM) from the passenger pick up point to drop off point
- **trip\_time\_mins** the estimated trip time (in minutes) from the passenger pick up point to drop off point
- **eta\_mins** the estimated duration (in minutes) for driver to travel from the location he/she receives the booking to the passenger's pick up point
- **ignored\_drivers** the number of drivers that have ignored the booking before a driver accepts it

Given the dataset of bookings, your task is to:

1. Explore and understand the dataset.
2. Prepare an analysis that explains (i) What possible factor(s) in a booking might impact the number of ignored\_drivers? (ii) What possible factor(s) in a booking might lead to a booking being cancelled?
3. Based on your results in 2), suggest business strategies or recommendations that would make sense. Please present your findings **concisely** in slide format. Assume that your audience comprises leaders of the Cambodia Grab Transport business. Please limit to a maximum of 5 slides, but you do not need to use all 5.
4. Suggest any other data, internal or external, that may help your conclusion.
5. Detail any additional insights or recommendations that may come up in your analysis of the data.

*Note: you may not need to use all variables to answer the question sufficiently.*

#### **Notes and hints:**

- Please be reminded that you've signed an NDA with Grab. The contents of the test as well as the dataset are confidential.
- This is a 3-hour test but you shouldn't need the entire time to do the analysis. Make sure to leave enough time to think about how to deliver your findings effectively.
- You may use any software, language, package, framework, or tools for your analysis but remember that your work has to be readable, understandable, and reproducible. It is always in your benefit to explain what you are doing and why.
- You may use any publicly available external datasets to complement your analysis but it is not necessary to answer the primary problem.
- You may search the internet to help you with your work.