



L B G D A I N C U B A T I O N L A B

**YOUR WEEKLY SCHEDULE**














# PRE INCUBATION START SPRINT PREPARATION

- + Skills portfolio (self assessment)
- + Learning path on QA’s Cloud Academy platform
- + Additional reading materials

- Working methods : Agile + SCRUM
- preparation for sprint 1
  - Segmentation & targeting
  - Consumer centrlicity
  - Python data visualisation
  - Binary classification models refresher
  - python lab challenges
- preparation for sprint 2
  - Naive bayes slide deck
  - Amazon food reviews example jupyter notebook



## ON CLOUDACADEMY

TITLE	JOB SKILL	DURATION
 Agile Essentials	-	48m
 Agile Best Practice	-	47m
 Agile Strategy	-	49m
 Scrum Master	-	3h 4m
 Segmentation Essentials	-	46m
 Segmentation Best Practice	-	48m
 Data & Targeting Essentials	-	46m
 Consumer Centrlicity Mindset	-	49m
 Python Beginner's Challenge Gauntlet	-	1h 40m
 Data Visualization with Python using Matplotlib	-	1h 21m
 Evaluating Binary Classification Models	-	1h



## ON GITHUB

 Amazon Food Reviews Sample
 Amazon Food Review Analytics.ipynb
 naivebayes_sprintprep.pdf



# SPRINT WEEKLY SCHEDULE DETAIL

**<Scenario outline>** you will face a new (related) bank scenario each sprint

**<DATE>** Each weekday is dedicated to progress on your SPRINT goals  
You will have a standup (check-in) at the start of sprint days to share:

- What you completed yesterday
- What you plan to do today
- What blocks, if any, you have

## + Notes

At end of each 2 week sprint block there is a structured group session  
Thursdays are typically LBG internal days (except easter week)  
You have a full week break between sprint 2 and sprint 3 [use this time to identify skills you need to develop, reflect on and update your portfolio]





# SPRINT 1

## CUSTOMER REQUIREMENTS & SEGMENTATION

**Scenario:** Requirements received from Marketing Team to visualise direct marketing campaign results and apply customer segmentation

- Tableau Segmentation Dashboard
- User Guide for dashboard
- Customer personas

**Development of Scenario:** Flag each customer as receptive or not

- Python - Classification model
- Embed python and results into PowerBI report
- Summary report





# SPRINT 1 WEEK 1 SCHEDULE

## CUSTOMER REQUIREMENTS & SEGMENTATION

**Scenario:** Requirements received from Marketing Team to visualise direct marketing campaign results and apply customer segmentation

- Tableau Segmentation Dashboard
- User Guide for dashboard
- Customer personas

**Monday 4/3** SPRINT

**Tuesday 5/3** SPRINT

**Wednesday 6/3** SPRINT

**Thursday 7/3** LBG INTERNAL

On Thursdays, Lloyds will lead activities to support your development; will include opportunities to shadow colleagues, attend 1on1s with Berenika to discuss and update your skills portfolio

**Friday 8/3** SPRINT + Peer Review session

In this session you will meet with a classmate to share your dashboards, giving constructive feedback so that each of you can iterate and improve





# SPRINT 1 WEEK 2 SCHEDULE

## CUSTOMER REQUIREMENTS & SEGMENTATION

**Development of Scenario:** Flag each customer as receptive or not

- Python - Classification model
- Embed python and results into PowerBI report
- Summary report

**Monday 11/3** SPRINT

**Tuesday 12/3** SPRINT

**Wednesday 13/3** SPRINT

**Thursday 14/3** LBG INTERNAL

**Friday 15/3** SPRINT + Sprint wrap meeting

This meeting is about the process, rather than the product. Your instructor will want to know what the technical challenges were and how you handled them





## **SPRINT 2**

# DATA INTEGRATION AND SENTIMENT ANALYSIS

**Scenario:** Operations director requires CRM tables to be integrated into relational database

- Database modelling in SQL
- Validation of data & technical report

**Development of Scenario:** Branch Analysis strategic input

- Branch Analytical Report and Video

**Development of Scenario :** NLP Sentiment and Topic Analysis in CRM data

- Jupyter notebook with NLP libraries





# SPRINT 2 WEEK 1 SCHEDULE

## DATA INTEGRATION AND SENTIMENT ANALYSIS

**Scenario:** Operations director requires CRM tables to be integrated into relational database

- Database modelling in SQL
- Validation of data & technical report

**Development of Scenario:** Branch Analysis strategic input

- Branch Analytical Report and Video

**Monday 18/3** SPRINT

**Tuesday 19/3** SPRINT

**Wednesday 20/3** SPRINT

**Thursday 21/3** LBG INTERNAL

**Friday 22/3** SPRINT







# SPRINT 2 WEEK 2 SCHEDULE

## DATA INTEGRATION AND SENTIMENT ANALYSIS

**Development of Scenario** : NLP Sentiment and Topic Analysis in CRM data

- Data preparation of customer reviews data
- Jupyter notebook showing use of NLP libraries
- NLP analysis summary report

**Monday 25/3** SPRINT

**Tuesday 26/3** SPRINT

**Wednesday 27/3** SPRINT

**Thursday 28/3** SPRINT + Round Table

The round table is a chance for you to tie up the sprint by reflecting on what you collectively aimed to achieve, how relevant are your findings to the business scenario and what would be the next steps. At a round table the cohort will learn from each other by swapping techniques and workarounds, you will also talk about time constraints and the challenge of working with incomplete data on meeting business needs

--FOLLOWED BY EASTER BREAK --





## SPRINT 3

# FRAUD PREVENTION AND FORECASTING WITH GCP AI

**Scenario:** Markets and Finance team request two projects on the Transactions table.  
Look at fraudulent transaction flagging first.

- Competition / Hackathon with Fraud Prediction model in Python, Pandas, SciKitLearn
- Trainer has validation data for model scoring

**Development of Scenario:** develop capacity for forecasting future transactions

- Time Series Analysis and Forecasting with Python, Prophet, StatsModels
- Deploy to GCP Cloud Storage/ Cloud SQL with AI services





# SPRINT 3 WEEK 1 SCHEDULE

## FRAUD PREVENTION AND FORECASTING WITH GCP AI

**Scenario:** Markets and Finance team request two projects on the Bank Transactions table  
Look at fraudulent transaction flagging first.

- Hackathon with Fraud Prediction model in Python, Pandas, SciKitLearn
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**Development of Scenario:** develop capacity for forecasting future transactions

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**Monday 8/4** SPRINT

**Tuesday 9/4** SPRINT

**Wednesday 10/4** MOP UP DAY

Use this time to iterate on any previous deliverable

**Thursday 11/4** LBG INTERNAL

**Friday 12/4** SPRINT





# SPRINT 3 WEEK 2 SCHEDULE

## FRAUD PREVENTION AND FORECASTING WITH GCP AI

**Scenario:** Markets and Finance team request two projects on the Bank Transactions table  
Look at fraudulent transaction flagging first.

- Competition / Hackathon with Fraud Prediction model in Python, Pandas, SciKitLearn
- Trainer has validation data for model scoring

**Development of Scenario:** develop capacity for forecasting future transactions

- Time Series Analysis and Forecasting with Python, Prophet, StatsModels
- Deploy to GCP Cloud Storage/ Cloud SQL with AI services

**Monday 15/4** SPRINT

**Tuesday 16/4** SPRINT

**Wednesday 17/4** SPRINT

**Thursday 18/4** LBG INTERNAL

**Friday 19/4** SPRINT + Sprint Post Mortem

This meeting seeks to consider what you would do differently if you started this sprint again, armed with what you now know about the technical challenges





## **SPRINT 4:** BIG QUERY AND GROWTH OPPORTUNITIES

**Scenario:** Product manager wants to discover growth opportunities and see insights from loan data of bank clients.

- SQL
- GCP Big Query
- Data Governance, Privacy and Documentation

**Scenario Development:** Discover growth opportunities for clients or products with E-Commerce Data

- Freedom to choose approach and tech stack
- Technical documentation presentation in small groups

**+Hiring manager - analyst scenario exercise**





# SPRINT 4 WEEK 1 SCHEDULE

## BIG QUERY AND GROWTH OPPORTUNITIES

**Scenario:** Product manager wants to discover growth opportunities and see insights from loan data of bank clients but the data is siloed

- SQL database contains luxury loan data
- You will surface the data via GCP Big Query
- Consideration for data governance, data protection, privacy

**Monday 22/4** SPRINT

**Tuesday 23/4** SPRINT

**Wednesday 24/4** SPRINT

**Thursday 25/4** LBG INTERNAL

**Friday 26/4** SPRINT





# SPRINT 4 WEEK 2 SCHEDULE

## BIG QUERY AND GROWTH OPPORTUNITIES

**Scenario:** Product manager wants to discover growth opportunities for clients or products with E-Commerce Data but the data is siloed

- Freedom to choose your approach and tech stack
- Technical documentation + presentation in small groups

**Monday 29/4** SPRINT

**Tuesday 30/4** SPRINT

**Wednesday 1/5** SPRINT

**Thursday 2/5** LBG INTERNAL

**Friday 3/5** SPRINT + hiring manager - analyst scenario exercise

this exercise will see you role-play the analyst and hirer to talk through the projects you have worked on and answer/pose competency based questions to see how well you can demonstrate your technical skills

--End of program + finalise your portfolio--







# ALL SPRINTS

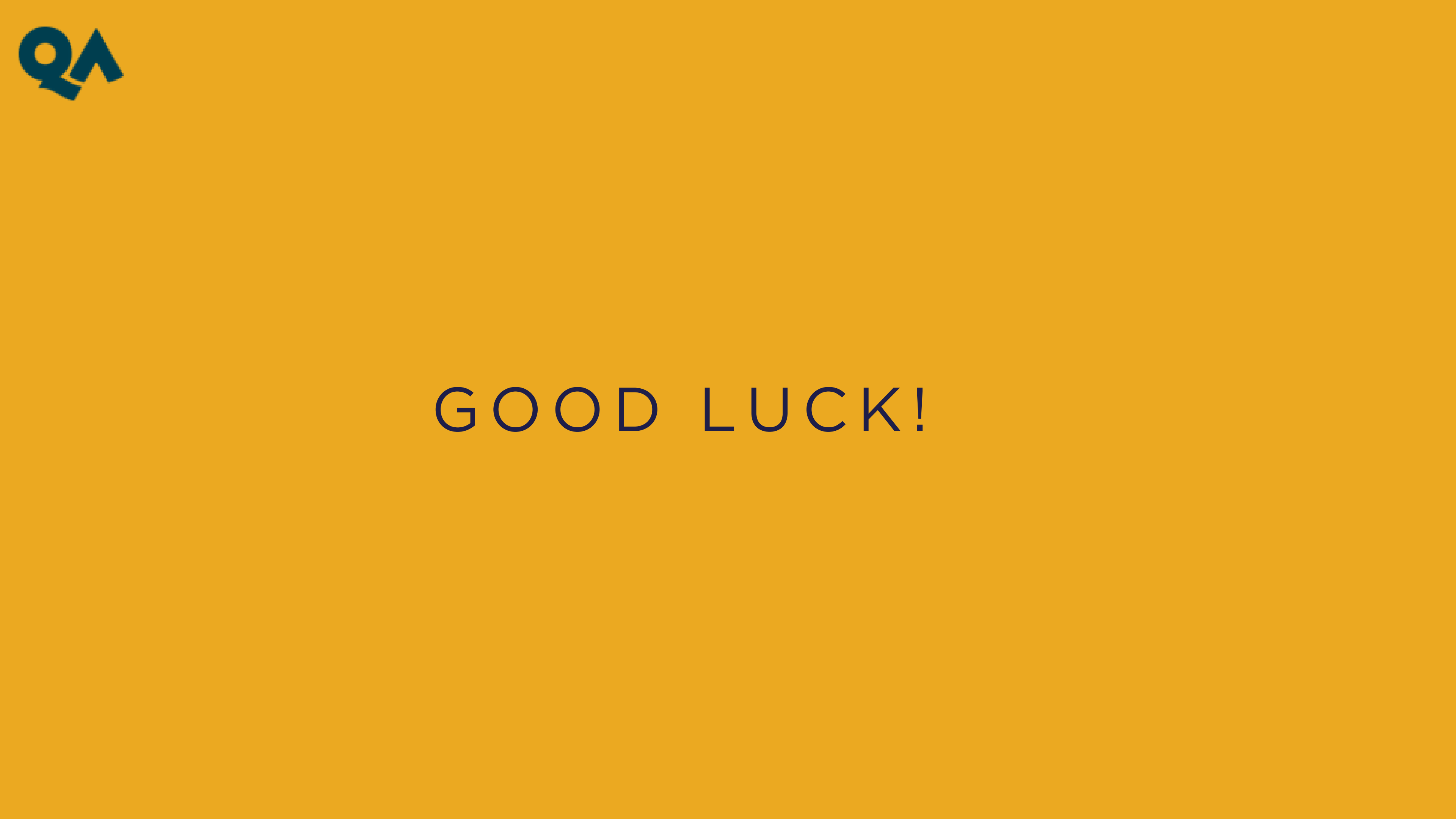
## PUSHING THE HELP BUTTON

**In your next role you may not always have technical help available on-hand so we have come up with the idea of a **HELP BUTTON** to synthesise this situation**

- You can use the 'help button' up to three times during every 2 week Sprint
- If you don't expect to use your allocated 3 button pushes in a sprint, you can loan them to your classmates
- When you attend your help button session, expect to share how you have tried to solve the problem yourself
- Don't expect someone to fix your code for you or log onto your machine in your help button session - your helper will guide you through the problem and suggest resolution







GOOD LUCK!