



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 centricity
 - 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 CLOUD ACADEMY

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 Centricity 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 Power BI 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 + Peer Review

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

Thursday 7/3 LBG INTERNAL

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

Friday 8/3 SPRINT





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 Power BI 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
- 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 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.

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Development of Scenario: develop capacity for forecasting future transactions

- Time Series Analysis and Forecasting with Python, Prophet, StatsModels
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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 see insights from loan data of bank clients but data is personally identifiable

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

Scenario Development: Discover growth opportunities

- 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 see insights from loan data of bank clients but the data is siloed and personally identifiable

- 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 existing clients or products 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!