Retail Customer Retention Analytics – ADIDAS

Project Overview:

Adidas, a global leader in sportswear and lifestyle products, operates across multiple countries through retail stores, franchise outlets, and e-commerce platforms. With intense competition from brands like Nike and Puma, along with rising customer expectations in digital shopping experiences, retaining customers has become a critical challenge. Although Adidas collects vast data on customer purchases, online interactions, and loyalty programs, their current reporting lacks the analytical depth to:

- Understand why customers are churning?
- Identify loyal vs. at-risk customers
- Measure the impact of loyalty tiers, promotions, and influencer-driven campaigns
- Guide region- and channel-specific retention strategies

You are hired as a Power BI Analyst to design a Customer Retention Dashboard that consolidates fragmented data and delivers real-time, actionable insights for Adidas.

Project Objective:

Develop a robust, interactive Customer Retention Analytics Dashboard in Power BI using Adidas data that will:

- Consolidate customer demographics, purchase history, store/e-commerce performance, and loyalty data
- Enable dynamic segmentation of high-value, repeat, and churned customers
- Provide actionable insights to improve customer retention, loyalty engagement, and regional strategies

(If you're unfamiliar with concepts like churn rate, or other domain-specific terms, feel free to take the help of Google or AI tools like ChatGPT or Gemini to understand better and apply them effectively in your project.)

Dataset Description:

1. Customer_Demographics.csv: Contains demographic and membership details for Adidas customers.
   Columns: Customer_ID, Age, Gender, Region, Income_Level, Membership_Since, Preferred_Channel (Store/Online)

2. Customer_Transactions.csv: Logs purchase transactions across Adidas retail stores, franchise outlets, and online platforms.

Columns: Transaction_ID, Customer_ID, Store_ID, Product_Category (Footwear, Apparel, Accessories), Transaction_Date, Amount, Promotion_Applied (Yes/No)

3. Store_Locations.csv: Metadata about Adidas retail and franchise locations.
   Columns: Store_ID, Store_Type (Flagship, Franchise, Outlet, Online), Region, Opening_Year

4. Loyalty_Program.csv: Tracks customer participation in Adidas' Creators Club loyalty program.
   Columns: Customer_ID, Loyalty_Tier (Base, Plus, Premium, Elite), Points_Earned, Points_Redeemed

5. Churn_Labelled_Customers.csv: Provides a churn flag based on last purchase date and behavioral indicators.
   Columns: Customer_ID, Last_Purchase_Date, Churn_Flag (0 = Active, 1 = Churned), Churn_Reason (Inactivity, Competitor, Low Engagement)

Tasks to be Performed:

(Please refrain from using AI to perform the tasks mentioned below, as it will only provide generic solutions.)

Task 1: Data Modeling & Cleaning (10 Marks)

- Load and transform datasets in Power Query
- Handle duplicates, missing values, and ensure correct data types
- Create calculated columns:
    - Membership_Duration = Today – Membership_Since
    - Extract Transaction_Year, Transaction_Month

Task 2: Churn & Retention Metrics (10 Marks)

- Create **Churn Rate KPI** = (Churned Customers / Total Customers) * 100
- Visualize churn rate by:
    - **Region**

    - **Income Group**
    - **Channel (Store/Online)**
    - **Loyalty Tier**
- Funnel Chart: Total Customers → Repeat Customers → Churned

Task 3: Repeat Purchase Analysis (10 Marks)

- Segment customers:
    - **Low-Tier:** 0–3 purchases
    - **Mid-Tier:** 4–8 purchases
    - **High-Tier:** 9+ purchases
- Compare avg. purchase frequency by **Region, Age Group, Loyalty Tier**
- Identify **most purchased product categories by loyal customers**

Task 4: Promotion & Loyalty Impact (10 Marks)

- % of transactions with promotion applied
- Compare **avg. purchase amount with vs without promotions**
- Churn rate across **loyalty tiers**
- Points Earned vs Redeemed by Tier (clustered column chart)
- Recommendations to **improve redemption & retention**

Task 5: Store & Channel Performance vs Retention (10 Marks)

- Merge store data with transactions
- Visualize:
    - Avg. transaction amount by **Store Type**

    - Churn rate by store type
    - Correlation between **store opening year & retention**

Task 6: Customer Lifetime Value (CLV) Analysis (10 Marks)

- CLV = Total Amount Spent / Membership Duration (Years)
- Segment customers into **Low, Medium, High CLV**
- Visualize:
    - CLV vs Days Since Last Purchase
    - CLV by **Loyalty Tier & Region**

Task 7: Final Dashboard & Executive Summary (20 Marks)

- Multi-page Power BI Report:
    - Page 1: KPIs (Churn, CLV, Repeat Rate)
    - Page 2: Loyalty & Promotion Impact
    - Page 3: Store/Channel Insights
    - Page 4: Segmentation (Churned, Repeat, High-Value)
- Slicers: Region, Channel, Income, Loyalty Tier
- Top 3 recommendations for Adidas:
    - **Which customers to prioritize for retention?**
    - **Which channels are underperforming?**
    - **How to strengthen loyalty program engagement?**

Task 8: Video explanation: Expressing the finding and actionable insights (20 Marks)

(The summary should be in your own words and must not be generated using AI. Please don't write a script and read it aloud. Also, screenshare and show the key findings. Marks will be deducted for failing to do so.)

Content: 3-5 minute video explaining:

- Introduction to the project.
- Problem statement.
- Key findings and insights.

Evaluation: Video quality, clarity of explanation, and presentation.

Evaluation Criteria:

- Quality of analysis and visualizations.
- Clarity in explanations and insights.
- Adherence to instructions and deliverables.

Project Submission:

Note:

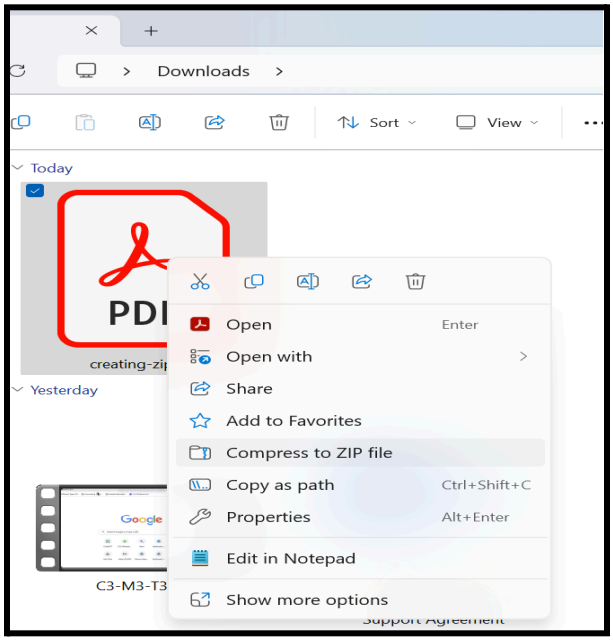
- The whole project should be submitted in a word file showing all tasks wherever with calculations, reporting features and dashboard with screenshots and the final submission should be in PDF format, converted from the Word file
- Plagiarism will result in a penalty, including possible project disqualification.
- The project will be evaluated based on the quality of analysis and visualizations, depth of insights, feasibility of recommendations, clarity of explanations, and adherence to instructions and deliverables.

Submission Guidelines:

- Save the PDF in a folder and then convert it into a zipped (.zip) folder. **(Please note, the drivelink for the video created should also be added in the PDF itself.)**
- Upload the zipped folder on your respective dashboard.
- Failure to comply with submission guidelines will result in no grading/0 marks.

How to ZIP a PDF file:

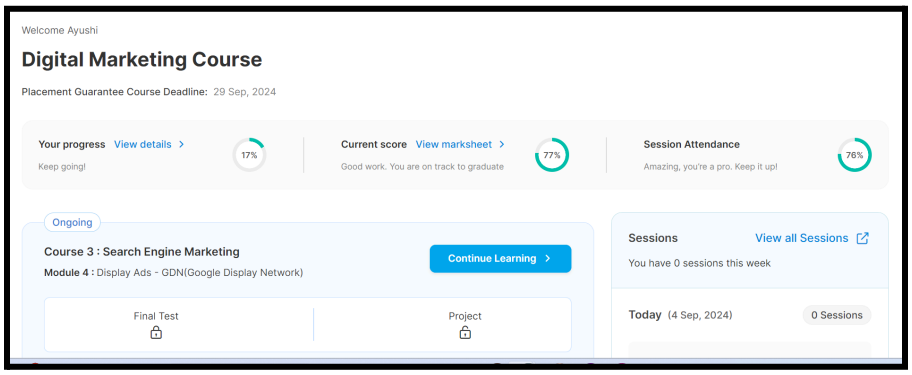
- Put all of the PDF you want to compress (or just one) into a new folder.
- Right click on that folder.



- Select the “Compress to ZIP file” option and then click “Compressed (Zipped) folder.”
- A new .ZIP file will be created that contains your document(s).

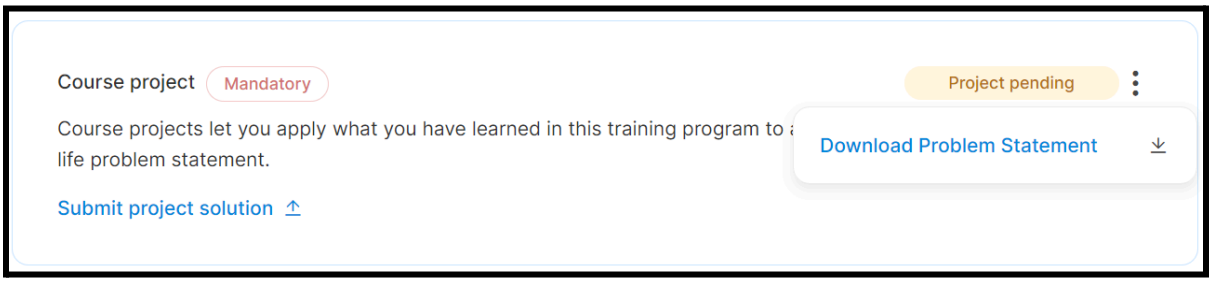
In order to submit the projects please follow the following steps:

1. Click on “ Your progress View details” after logging into your dashboard.



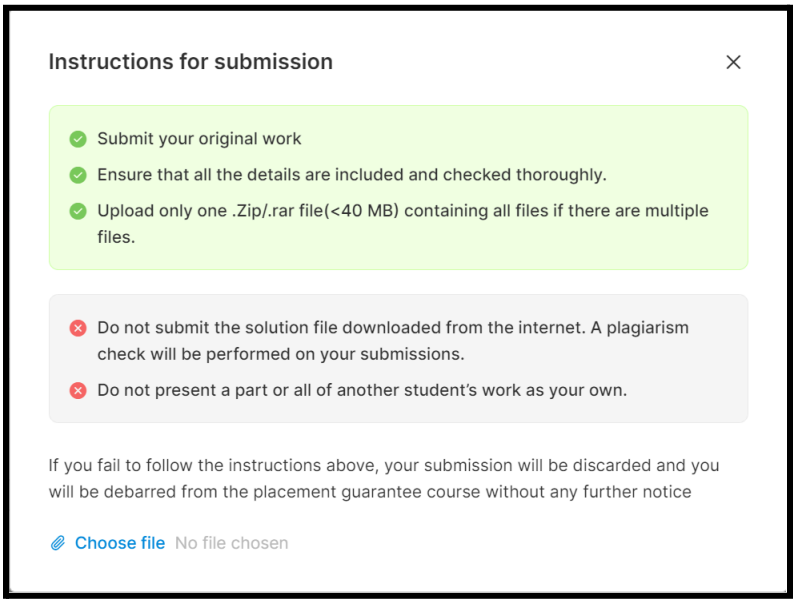
2. Next, click on the tab for the specific child course for which you want to download the problem statement. Then, scroll down to find the "**Course Project**" section.

3. Now, click on the three dots on the right-hand side of the "Course Project" tab to select **"Download Problem Statement."**



4. Please follow the guidelines (screenshot is shared below) provided in the project to ensure correct submissions. Then, click on "**Upload Project Solution**" to submit

your work.


Instructions for submission
Submit your original work
Ensure that all the details are included and checked thoroughly.
Upload only one .Zip/.rar file(<40 MB) containing all files if there are multiple files.
Do not submit the solution file downloaded from the internet. A plagiarism check will be performed on your submissions.
Do not present a part or all of another student's work as your own.
If you fail to follow the instructions above, your submission will be discarded and you will be debarred from the placement guarantee course without any further notice
Choose file
No file chosen