

INTERNSHIP PROGRAM

DATA ANALYTICS

60-DAYS



www.apexplanet.in



About Us



At ApexPlanet Software Pvt. Ltd., we are dedicated to driving innovation and excellence in the realm of digital solutions. Founded with a vision to empower businesses through cutting-edge technology, we specialize in delivering top-notch web development and app development services tailored to meet the unique needs of our clients.

Our team of skilled professionals is passionate about creating robust, scalable, and user-friendly applications that enhance user experiences and drive business growth. We leverage the latest technologies and industry best practices to ensure that our solutions are not only effective but also future-proof.

In addition to our core services, ApexPlanet Software Pvt. Ltd. is committed to nurturing the next generation of tech talent. We offer comprehensive internship programs that provide hands-on experience and mentorship, preparing aspiring developers for successful careers in the software industry.

Join us on our journey to make a significant impact in the digital world. With ApexPlanet Software Pvt. Ltd., your business is poised for success, and your career is set on a path of continuous learning and achievement.

How to Submit Your Internship Task

1. Prepare Your Task

- Complete your task before the submission date.

2. Create a Screen Recording

- Record your project using screen recording software and the video file.

3. Upload Video to LinkedIn

- Log in to LinkedIn.
- Go to your profile, add the video under "Featured."
- Copy the video link.

4. Upload Project to GitHub

- Create a GitHub account (if you don't have one).
- Create a new repository and upload your project files.
- Make the repository public and copy the link.

5. Register and Log In to ApexPlanet

- Go to [ApexPlanet Internship](#).
- Register and log in.

4. Submit Your Task

- Go to "Manage Task."
- Verify using your offer letter ID and email.
- Click on the relevant task button.
- Fill in the details, paste the LinkedIn video link, and the GitHub repository link.
- Submit.

5. Open the Next Task

- After submitting, click to open the next task and repeat the process.

This streamlined process ensures your tasks are submitted professionally and on time.



Internship Tasks for Data Analytics

TABLE CONTENT

- **TASK 1**
Data Immersion & Wrangling
- **TASK 2**
Exploratory Data Analysis (EDA) & Business Intelligence
- **TASK 3**
Deep-Dive Analysis & Interactive Dashboarding
- **TASK 4**
Data Storytelling & Statistical Validation
- **TASK 5**
Capstone Integration & Portfolio Finalization



Data Immersion & Wrangling

Objective:

- To rapidly acquaint the intern with the provided dataset and master the critical first step of any analysis: acquiring, cleaning, and preparing data for analysis.

Steps:

1. Data Access & Familiarization :

Grant the intern access to a key dataset (e.g., sales transactions, website analytics, customer data). The intern will create a data dictionary, documenting each variable's meaning, type, and potential business relevance.

2. Data Quality Assessment :

The intern will perform an initial profiling of the data to identify critical issues: missing values, duplicates, inconsistent formatting, and outliers.

3. Data Cleaning & Transformation :

- Write scripts (e.g., in Python/Pandas or SQL) to handle identified data quality issues.
- Perform necessary transformations: standardizing date formats, categorizing free-text fields, and feature engineering (e.g., creating new columns like 'Customer Age' from a 'Date of Birth' column).
- Output a final, analysis-ready dataset.

Deliverables:

- GitHub: Data dictionary, cleaning script, cleaned dataset
- LinkedIn Video: 3-5 min walkthrough of data issues and cleaning process





Exploratory Data Analysis (EDA) & Business Intelligence

Objective:

- To uncover patterns, trends, and relationships within the data and develop proficiency in SQL for data extraction and basic dashboarding.

Steps:

1. Descriptive Statistics & Univariate Analysis :

Calculate and interpret key summary statistics for numerical and categorical fields. Create initial visualizations (histograms, bar charts) to understand distributions.

2. SQL for Business Questions :

- Provide the intern with a list of 5-7 specific business questions (e.g., "What are the top 5 products by revenue in the last 6 months?", "What is the monthly user acquisition trend?").
- The intern will write and execute SQL queries to answer these questions, focusing on filtering, aggregation, and multi-table joins.

3. Multivariate Analysis & Correlation :

Create advanced visualizations (scatter plots, heatmaps, pair plots) to explore relationships between two or more variables (e.g., marketing spend vs. sales, age vs. product category).

4. Static Dashboard Mock-up :

Using the insights from EDA, the intern will create a static mock-up (in PowerPoint/Google Slides or Excel) of a key metrics dashboard, proposing the most important KPIs to track.

Deliverables:

- GitHub: EDA report, SQL queries with results
- LinkedIn Video: 5-7 min showcase of key insights and complex queries





Deep-Dive Analysis & Interactive Dashboarding

Objective:

- To answer complex, multi-faceted business problems by performing a deep-dive analysis and building an interactive, automated dashboard.

Steps:

1. Define Core KPIs :

Based on prior work, the intern will formally define 3-5 core Key Performance Indicators (KPIs) with formulas and business rationale (e.g., Conversion Rate, Customer Churn Rate, Average Order Value).

2. Deep-Dive Analysis : The intern will select one key business area for a deep-dive. Examples:

- Cohort Analysis: Analyze customer retention and lifetime value.
- Funnel Analysis: Visualize and analyze user drop-off in a key process.
- Segmentation Analysis: Use clustering or business rules to segment customers.

3. Interactive Dashboard Build :

Using a BI tool (e.g., Tableau, Power BI, Looker Studio), the intern will build a functional, interactive dashboard that surfaces the core KPIs and allows users to explore the deep-dive analysis.

Deliverables:

- GitHub: Deep-dive report, link to live dashboard
- LinkedIn Video: 5-7 min demo of interactive dashboard and key findings





Data Storytelling & Statistical Validation

Objective:

- To synthesize all analysis into a compelling business narrative and use basic statistical methods to add rigor and validate key findings.

Steps:

1. Craft the Data Story :

Structure all findings from Parts 1-3 into a cohesive narrative for a business audience. The story should have a clear objective, analysis, conclusions, and a call to action.

2. Develop the Final Presentation :

- Create a professional presentation deck (PowerPoint/Google Slides) that is visual, concise, and tells the story effectively, focusing on business impact.

3. Hypothesis Testing :

- Formulate a testable business hypothesis (e.g., "The new website layout led to a statistically significant increase in conversion rate.").
- Perform an appropriate statistical test (e.g., A/B test using T-test, Chi-squared test for proportions).
- Interpret the results (p-value, confidence intervals) and state the business conclusion.

Deliverables:

- GitHub: Final presentation deck, hypothesis testing summary
- LinkedIn Video: 7-10 min stakeholder presentation of insights





Capstone Integration & Portfolio Finalization

**Objective:**

- To consolidate all work into a professional portfolio, demonstrating a complete and masterful end-to-end project.

Steps:**1. Master Portfolio Creation :**

- Create a master GitHub Repository named [YourName]-DataAnalyst-Internship-Portfolio.
- This should be a polished, single point of reference. Structure it with:
 - A high-quality README.md that serves as a project homepage, with an overview of the entire internship.
 - Links to each of the four previous part-specific repositories.
 - A final, refined version of your presentation deck.
 - A summary of key learnings and technical skills demonstrated.
- (Optional but highly recommended): Create a simple personal website using GitHub Pages to host this portfolio in a more visual format.

2. Final Review & Professional Reflection :

- Review all your repositories and videos for consistency, professionalism, and clarity.
- Draft a LinkedIn post summarizing your internship experience, the skills you've built, and linking to your master portfolio.

Deliverables:

- GitHub: Master portfolio with all project links
- LinkedIn Video: 3-5 min portfolio walkthrough and learning reflections



Thank You for Your Attention



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