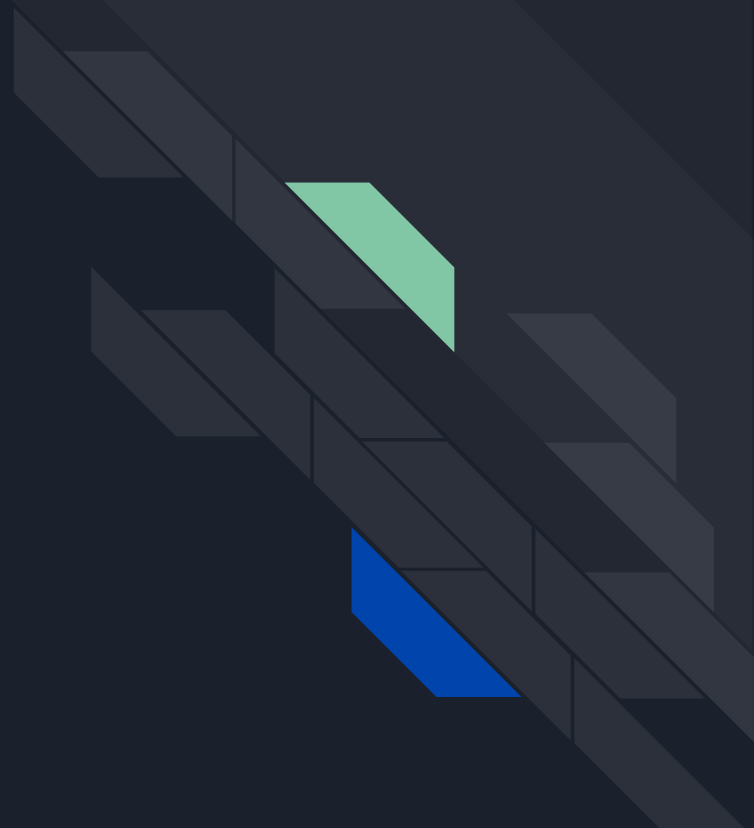




INSTAGRAM USER ANALYTICS

UTKARSH ANANT

- Project Description
- Approach
- Tech-Stack
- Insights
- Result
- Project Link





PROJECT DESCRIPTION

- Objective of this project is to gain insights and improve engagement, reach, and performance on Instagram.
- The areas of analysis include loyal users, post reminders, popular users, top hashtags, peak registration days, and fake accounts.
- User engagement is also analyzed using the metrics such as average number of images and number of users and photos on the platform.
- These insights will be used for informed decisions to improve engagement and performance.



APPROACH

PLAN | PREPARE | PROCESS | ANALYZE | ACT | SHARE

The project was completed in several steps. First, I understood the tasks and identified the necessary data sources and tools for analysis. Next, I prepared by installing and updating the required technology stack and connecting to the database. In the processing stage, I understood the structure of data and broke down the tasks into elementary operations. Next, I understood the metrics associated with each task. I then used SQL and Python to perform the analysis in the action stage. Finally, I shared the analysis report by creating a PDF document and linking to the Jupyter notebook containing the analysis.



TECH - STACK : Main Tools

| TOOL | VERSION | USE |
|-----------------|---------|--|
| Python | 3.9.13 | Programming language used query MySQL database |
| VS Code | 1.76.2 | IDE to run Jupyter notebook server |
| MySQL Server | 8.0.32 | Server to store database and query it |
| MySQL Workbench | 8.0 CE | Used to visualize the database |
| Git | 2.40.0 | Used for version control and track changes. |



TECH - STACK : Python Libraries

| TOOL | VERSION | USE |
|------------------|---------|---|
| my-sql-connector | 8.0.32 | Connects to MySQL Server |
| pandas | 1.5.3 | Data analysis, manipulation and visualization |
| prettytable | 3.6.0 | Displays result in tabular format |
| math | - | Provides access to mathematical functions |



INSIGHTS

- The oldest users have been using Instagram since 2016 indicating that the platform has been actively running for 6+ years.
- 26 % of the users have never posted a single photo, which is significant and indicates a lack of engagement.
- The most liked image on Instagram has been liked by 48 % of the users, which is a huge number and should be taken up as a case study.
- Hashtags are one of the major factors in increasing the reach of the posts and must be chosen wisely.
- Knowing the day of the week when most users register on Instagram can help in scheduling an AD campaign to target the largest possible audience.



INSIGHTS

- On average, users make between 2 and 3 posts, which is a low number. There is a need to take steps to increase the number of posts made by users.
- Bots can be identified by their actions, which differ from those of a human account.
- 13% of the accounts have been identified as bots, which is a significant percentage. Therefore, it is imperative to implement strict verification measures to ensure human users.



RESULT

- Gained hands-on experience with SQL and Python, working with large datasets and retrieving specific information using SQL queries.
- Developed analytical and problem-solving skills by solving real-world marketing and investor problems.
- Gained insights into marketing strategies and social media analytics, which could be useful for future marketing campaigns.
- Developed critical thinking skills by finding creative solutions to complex problems, and gained proficiency in working with databases and data manipulation techniques, which are valuable in various industries and fields.

PROJECT LINK 

