

# DATA ANALYSIS

# INTRODUCTION

- In Egypt, not all developer jobs pay the same.
- We explored how role, experience, work type, and city affect salaries.
- This helps new developers understand the real tech job market.

# PROJECT OVERVIEW

## Project Purpose

- Job role (e.g., frontend, backend)
- Experience level
- Work type (remote, hybrid, on-site)
- Location (urban vs. developing cities)

## What We Did

- Collected real 2024 salary data from developers in Egypt
- Cleaned and analyzed the data
- Used ANOVA and T-tests to compare groups
- Created graphs to visualize trends

# RESEARCH QUESTION & HYPOTHESES

## HOW DO EXPERIENCE LEVEL AND WORK TYPE INFLUENCE SALARIES AMONG DIFFERENT DEVELOPER ROLES IN EGYPT?

### JOB ROLE VS. SALARY

- $H_0$ : Experience does not affect salary
- $H_1$ : Salary changes based on experience level

### EXPERIENCE LEVEL VS. SALARY

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### WORK TYPE VS. SALARY (REMOTE / ON-SITE / HYBRID)

- $H_0$ : No salary difference by work type
- $H_1$ : At least one work type has a different average salary

### CITY (URBAN VS. DEVELOPING)

- $H_0$ : No salary difference between cities
- $H_1$ : Urban and developing cities have different salaries

# **DATASET OVERVIEW**

- Our data included:
  - Job roles (Frontend, Backend, Mobile, etc.)
  - Experience levels (0–1, 2–3, 3+ years)
  - Work types (Remote, Hybrid, On-site)
  - Cities (Cairo, Tanta, etc.)
  - Salaries (in EGP)

# KEY FINDINGS – JOB ROLE

- Some roles appear higher paid visually
- ANOVA p-value = 0.2510
- ~~No significant salary difference by role~~

# KEY FINDINGS – EXPERIENCE

- 0-1 yrs: ~12K EGP
- 2-3 yrs: ~21K EGP
- 3+ yrs: ~38K EGP
- p-value = extremely low
-  Experience strongly affects salary

# KEY FINDINGS – WORK TYPE & CITY

- Remote/Hybrid > On-site
- p-value = 0.1925 ✗ Not significant
  
- Urban cities earn more (Cairo, etc.)
- p-value = 0.00000098 ✓ Significant
- ✓ City matters more than work type

# KEY FINDINGS – WORK HOURS

- Full-time avg. salary: ~20K EGP
- Part-time avg. salary: ~13K EGP
- T-test p-value = 0.1401
- ✗ No significant salary difference by work hours

# CONCLUSION

- Experience is the strongest salary factor
- City also affects pay significantly
- Role and work type don't matter as much
- Advice:
  - Focus on gaining experience
  - Target urban job markets

# **OBSTACLES & CHALLENGES**

- Messy salary and job title formats**
- Conversion to EGP**
- Removed non-Egyptian responses**
- Uneven response counts across roles**

**DOES ANYONE HAVE A  
QUESTIONS?**

# MEET THE GROUP

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**THANK YOU**