TKO7093 – STATISTICAL DATA ANALYSIS

Project Plan

Group 160

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Project deadlines and exam preparation

- **Project report deadline:** Submission of the final report will be done by the 27th of January 2026 (By the end of the day)
- **Presentation:** Scheduled for 28th of January at 14.00
- Exam preparation and scheduling:
  - We ensure that the next two days will be dedicated to studying and revising for the exam as a group.
  - The goal is to take the exam by the 30th of January.

Group work and Internal milestones

Tools to be used

- **Google Colab:** For shared coding
- **OneDrive/Word:** Shared working on the documents
- **Zoom and WhatsApp:** For discussions and daily updates
- **Visual Studio:** For sandbox coding and testing

Internal milestone schedule

- **January 21 (Today):** Finalize and submit Project Plan. Initial data exploration and cleaning.
- **January 22–23:** Completion of Task 1 (Characterization) and Task 2 (Time Estimation).
- **January 24–25:** Completion of Task 3 (Living environment/Day analysis) and Task 4 (Associations/PCA).
- **January 26:** Peer review of code, final results interpretation, and drafting report.
- **January 27:** Final formatting, proofreading, and submission.
- **January 28**: Presentation rehearsal and preparation in the morning and the presentation in the afternoon.

Meeting Schedules

- **Frequency:** As discussed, there will be a team meeting daily at 19.00 via zoom to discuss the progress and blockers.
- **Face to face:** We have discussed to have a prioritized session on the 25th of January to finalize the "Interpretation and Conclusions" section of the report.

Responsibilities and Cohesion

All members of the group will be contributing to the data analysis and the report writing. Then we will all proofread the whole project and the documentation as discussed. Below table shows the breakdown of the tasks and members responsible.

Task	Assigned member/s	Description
Data Prep & Task 1	Ayana	Data cleaning, household summaries, and demographic characterization.
Task 2 & Task 3	Yagya	Statistical estimation of time use and hypothesis testing (environment/day differences).
Task 4 & PCA	Shehryar	Analyzing associations between activities and performing Principal Component Analysis.
Report Integration	Yagya	Ensuring consistent tone, formatting, and statistical rigor throughout.
Code Validation	Ayana/Shehryar	Cross-checking scripts for accuracy and reproducibility.

Ensuring Coherence

A unified markdown template (Jupyter Notebook) will be used as instructed. All three members will be reviewing and thoroughly discussing their tasks in the daily meetings ensuring that the others are on synced.

Ensuring Shared Learning

It was discussed to break down the objective, Methodology used and Results to be summarized before the meetings to explain to the rest of the members. This approach will ensure that all members understand every detail for both the examination and the presentation.

On the 28th of January in the morning, there will be a Q&A session to ask questions assuming what the lecturer might ask each member about their respective tasks.

Presentation

We will present our work on January 28th at 14:00. A presentation will be prepared to compile the project work for 15 minutes.