

Collaboration Report - Group 10

Our group is composed of five people from three nationalities: Gianni BIAGIANTI, Vittorio FERRARI, Stefano MAFFEZZOLI, Sebastian MOTTA GAMBINI, Jacques QUAREZ (leader).

Collaboration Foundations

This Data Science project was not our first time working together. We had previously collaborated a few weeks prior on the Investment Instruments course project.

This first experience was fundamental. It allowed us to establish an effective group dynamic and learn to communicate smoothly. Having already defined our working methods, we were able to tackle this second, longer, and more complex project with immediate efficiency.

Our collective Python experience was limited, as no member had completed a full Python course before this one. However, we were all eager to learn, recognizing Python's importance for our future careers in Asset Management. This motivation drove us to actively utilize the lectures and find online resources to build our skills. We made a conscious effort to keep track of and save references for code snippets or key insights we found.

Methodology

Phase 1: Individual Immersion (Thinking Before Acting)

Before any group meeting, we agreed that each member would first analyze the case on their own. The objective was simple: to give everyone time to develop their own ideas, intuitions, and potential solutions without being influenced. We wanted to avoid the *groupthink* pitfall, where the first idea shared biases the rest of the discussion.

Phase 2: The Kick-off Meeting

We then gathered for a crucial work session. During this meeting: (1) everyone presented their initial findings and ideas, (2) we put our skills on the table, particularly our respective proficiency levels in Python, to identify our strengths, (3) we compared our analyses to collectively define the most relevant strategy for the case, (4) finally, we established an action plan and assigned the initial tasks.

Phase 3: Agile Execution Through Continuous Contribution

Once the plan was set, we did not work in silos. We adopted an agile working model, which seemed rational as we wanted to operate like a developer team. Each member advanced on their part while constantly informing the others. We maintained very regular contact points, primarily through reactive WhatsApp discussions and quick debriefs after class. Each member contributed their part as they went, allowing others to build upon their work.

Communication

Our WhatsApp group was our primary work tool. We committed to being highly responsive, which allowed us to resolve issues or answer questions in minutes, not days. We held several follow-up meetings to synchronize our progress. Our rule was that every member's voice must be heard. If a person could not be physically present, we systematically ensured they could join via a call (phone or video). No decision was made without everyone having the opportunity to give their input.

Outcome

This methodology proved to be perfectly suitable. We did not encounter any major roadblocks. All members of Group 10 are satisfied with the work accomplished and the quality of our collaboration, which I consider a success. While everyone was fully involved in all aspects, from coding to writing, I would like to highlight a few particularly noteworthy contributions. Stefano proposed the original AI-driven risk dashboard concept. Motta focused on drafting the professional text-content. Vittorio and Gianni provided crucial support in the code's creation.

As leader, my role was to provide overall direction, coordinate all moving parts, and make the final decisions to ensure project cohesion. I also assumed responsibility for the final integration and delivery of all components, including the report, to guarantee a unified and high-quality submission.

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