

## Group Work Reflection

The following document provides insight on the logistics and admin related to producing the re-engineered implementation of the Genesis admixture visualisation tool. Reflection with regards to both the personal experiences and those experienced as a group are presented as well.

At the beginning stages of the laboratory project members Gary Bezuidenhout (Gary) and Isheunesu Jairosi (Anesu) decided to be partners. The two hadn't worked together before on any academic related work. This project would be the first they would work on together. Anesu experienced some issues with regards to registration to the course and as a result this delayed the group registering on the lab project website. Once all the registration issues were sorted the group was able to register, however due to the class having an odd number of students one student, Dylan Jacobsen (Dylan), was not assigned to a group. As a result, all three students met with Prof Steven Levitt and Hugh Hunt to discuss a three-person group for the project.

While sorting all the admin issues Gary and Anesu reviewed the project list and filtered their options based on software related projects. The two are both highly interested in the field and as a result the projects chosen reflected that. Bidding rights were received and once Dylan joined as the third member the Genome Admixture Visualization Project was selected as the first choice. Due to groups focusing on other project, the group was lucky enough to attain the first choice project.

Work on the project only began during the preliminary report stage, this was mainly due to the fact that no procurement of equipment was required for the project. The group met twice during the preliminary report period to discuss possible application designs and why choosing a specific design would benefit the group. One of the major decisions required to be made was that of the chosen method of implementation, the group was for a JavaScript based project implemented using the Electron framework, however the supervisor was more for a Java based application.

At the start of the lab project itself, the group decided to develop a dual Java and JavaScript project, with Java being the main focus for the back end implementation and JavaScript for the front end implementation. Concerns with regards to achieving a well-designed modular and scalable system prompted the decision.

Anesu was required to undergo a medical operation in the second week of the project schedule but informed the group he would be available from the third week onwards, this however was not the case as he did not return and did not communicate with the group in this regard.

Gary and Dylan moved forward with the project as a pair and decided to continue without Anesu. The two worked together on the application design and begin implementation on their respective sections of the code. A git repo was created however, Dylan did not accept the invitation to repo. As a result, Gary was not able to view any progress made. Two weeks before open day, Dylan became highly unreliable and did not communicate at all. Gary presented the issue the Prof. Hazelhurst but the measures put in place to rectify this matter failed. It was later found out that Dylan was ill and would not continue with the course and apologies were extended for the lack of communication.

Ultimately Gary would have to work on the project alone and a lot of work that was initially planned for Anesu and Dylan fell on his shoulders in the final weeks of the project. The shared application structure was implemented in the final weeks containing only the ability to create a single plot. This

nature of project and the events that occurred forced Gary to take what was meant to be a shared project and implement as much as possible in the short time period on his own.

In terms of personal reflection, I generally have many frustrations and issues with regards to the way my group partners went about the project. One major issue of concern was the lack of communication from both parties. An integral part of a successful group work endeavor is communication and the lack of it was an unfortunate theme throughout the project.

I as an individual am not happy with what was produced as a final software application as I believe that something much better could've been achieved had the circumstances not affected the project the way they did. The timing of the incidents also affected the work as work that was supposed to be done earlier had to be redone in the final weeks which hindered the progress. The final application developed, under the circumstances I believe are satisfactory, however I would've loved to contribute much more to this project.