In order to host an election for our school’s Student Council, I made use of a combination of Microsoft Forms and Microsoft Excel, in which the results were collected, filtered, and tallied automatically. This was made possible due to the recent introduction of Office 365 in Al Diyafah, a collection of web technologies that students can use to supplement their learning experience, in which each student is given their own personal O365 account.

Two forms were designed, one for boys and one for girls (as they have separate elections), in which the various positions and candidates were included in the form of choice questions, limited to one response per position. This form was accessible by email or ready-to-use in the computer labs which served as voting stations for the day, and students were only required to log on to their unique O365 accounts to begin voting. As the students input their votes, we could instantaneously output the results live, processing them into rankings and charts.

However, a challenge lay in ensuring that the house-related positions were only accessible for a student’s respective house. As no such method exists within Microsoft Forms itself, I had to combine it with Microsoft Excel. To do so, I included an additional question in the Form, asking for the voter’s house. So after voting for the general positions, the voter would proceed to vote for their respective house positions. After all the voting was complete, I exported the results into an Excel spreadsheet, a built-in capability of O365. Here, I could use Excel’s vast filtering and processing abilities to disregard the votes for particular house positions in the cases where it did not match the house a voter said they were part of. Hence, I could apply this to all voter entries, only extracting valid house votes. This was then consolidated with the general votes (which require
no filtering) to produce a final report on the election results, for both the boys’ and girls’ elections. Previously, in the paper-based voting system, this functionality was not possible, making this election the first time we were able to do so.

Filtering was not the only advantage to the system; security was also vastly improved. Since voters used their unique O365 accounts, no duplicate votes were allowed. Furthermore, only O365 accounts belonging to Al Diyafah were capable of performing these votes, so it was not possible to make additional accounts to make additional votes as well as it not being possible for people outside of school to vote.

The actual voting procedure took place immediately after the candidates delivered their speeches to the student body. Students were directed to the two computer labs, where they would simply log on to their accounts and cast their votes. The voting system was so secure that in fact the Sixth Form students were allowed to vote on their own personal devices from the BYOD (Bring Your Own Device) option offered to students, as we could ensure all students were voting and that no illegitimate vote could possibly be cast.

Finally, at the end of all the voting, the results were rapidly processed and output, to be announced over the school PA system so the selected candidates could be the first to hear of their success. Overall, the online voting system vastly improved its manual predecessor in terms of speed, accuracy, and reliability.

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Year 13 B