System Design Project (SDP)

Response to student feedback in 2020/21 course survey

We have taken note of the feedback from students in this course survey, and have the following comments in response.

- **Regarding the course workload:**

  There seems to be a consensus on the fact that the course is too demanding for students. Workload management is done by the students themselves and is one of the learning objectives for the course and the reported worked hours in their reports are often below the expected 200 hours dedicated to the course. However, for next year, we have decided to reduce the number of deliverables required from the students and to better distribute the deadlines along the semester to facilitate the planning of the projects. We will also encourage more interaction between the student and staff along the semester to ensure better support along the project.

- **Regarding the suggestions for additional work from the students on the report deadlines (longer reports / video, individual reports etc):**

  We believe those suggestions are in contradiction with general feeling that the SDP course is too demanding and on the contrary, we will aim to reduce the number of demos and amount of work required to meet those deadlines, in particular regarding the last demonstration.

- **Regarding the technical issues encountered with respect to the simulator and the need for additional training:**

  This year has required the introduction of simulators to the SDP course to compensate for the lack of access to AT buildings. While the required software have been installed on DICE machines (ie ROS (Robotics Operating System) / Webots / Gazebo), the course has required students to often install the software on their own devices and this has led to a variety of compatibility issues. While we hope that this problem will no longer exist next year we will deliver ready to use virtual machines with the required software next year if required.

  We are considering hiring additional resources to provide more tutorials, at least on ROS, at the beginning of the semester. Still, part of the course consists in autonomously learning how to use external software through browsing the documentation and the use of online resources. The comments saying that there is little resource / support for the software used in the course are not accurate, especially regarding ROS for which a strong and active community exists. Several groups were able to successfully achieve their objectives autonomously. However, we do believe that coming back to a 'normal' version of SDP where everyone uses the same configuration on DICE machines will resolve most of the issues encountered this year.

- **Regarding the marking criteria, demo feedback and the application of the CMS:**

  A variety of comments underline that the evaluation of the demos has often been biased, and that the grades did not improve even after requested changes had been implemented. While we do not claim to be perfectly impartial, every demonstration has been evaluated by 4 judges to reduce this bias as much as possible. As a result, claims saying for instance that the mark would vary depending on the mood of the client or that they did not review the material beforehand are obviously non relevant. Overall the mentors (who took the course last year) found that there was on the contrary a significant improvement in the quality of the feedback we provided and its consistency, especially with the introduction of the client role. Regarding the strict application of the Common Marking Scheme, we understand the importance of the issue for the students and will make an effort to satisfy at best the students next year.

- **Regarding communication and material access:**

Student feedback is contradictory on the topic. Some found that the information and material was easy to find and that instructions were clear, while other thought that this was not the case. We will study how we can better structure the learn page for the course to minimise the confusion.

Steve Tonneau and James Garforth , 12 / 08 / 2021