CS4800-5800-Project 3

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Project 3 (Due Date: December 10th, Demos: November 20 -Dec 10th, 2019: **No Extensions please**) With VR and Drones providing new forms of 3D interactions, this project has three sub-goals which can be achieved group of two students work with the GTA assigned for the class. (If you are a student with approved term project you will continue with that term project with the **same deadlines** as indicated for this project.)

(a) One of our graduate students has created a web-site on how to manage DJI tello drones, and provide a setup for DJITello small drones. The link for the DJI Tello EDU drone is at (https://store.dji.com/product/tello-edu?vid=47091). The library can be found at this url https://github.com/damiafuentes/DJITelloPy. Please use the library and code so that basic program using DJI Tello can be executed. For Python IDE refer to https://www.jetbrains.com/pycharm/ (40 points).

(b) Learn about a VR system and an application developed by own GTA using Unity3D™, its setup, the algorithm, compilation and learn how to execute the system which was developed by the GTA. (40 points).

(c) Extend either (a) or (b) to include some of your suggestions – offering the future of AR/VR-Drones towards applications such as Homelessness solutions; Sustainability projects such as collecting Garbage from the Sea; or solving a problem facing global society at the moment. What are the minimal changes you will need to make to the code of (a or b)? (10 points).

(d) Write a 2-page report based on coverage of VR and Drones in the class, and (a-c) above. (10 points).

Once the assignment is done, please arrange a time during office hours for a demonstration of the project. I will post the sign-up sheet at my office door (EN 180) for project demonstrations or the GMI Lab. Please submit a two-page description of your project during the demo.

Good luck. If you have any questions, please let me know.