

CS3031 Project 2

Securing the Cloud

The aim of this project is to develop a secure cloud storage application for Dropbox, Box, Google Drive, Office365 etc. For example, your application will secure all files that are uploaded to the cloud, such that only people that are part of your “Secure Cloud Storage Group” will be able to decrypt your uploaded files. To all other users the files will be encrypted.

You are required to design and implement a suitable key management system for your application that will allow you to share files securely, and add or remove users from your group. You are free to implement your application for a desktop or mobile platform and make use of any open source cryptographic libraries.

Note

- You should provide a high-level description of the protocol design and implementation. A listing of the code should also be provided along with meaningful comments. You are required to submit a **single** PDF file containing the documentation and code using the Turnitin system.
- All submitted work **must** be original and your own. Please familiarize yourself with the College Plagiarism guidelines - <https://www.tcd.ie/undergraduate-studies/general-regulations/plagiarism.php>. Submissions that are similar to each other will result in zero marks being awarded to all parties that are identified.
- Late submissions will not be accepted unless accompanied by a medical certificate or an email from your Tutor outlining the reasons for the lateness.
- This project is worth 10% of the marks and will be graded out of 100 marks

Demonstrations will take place during week twelve of the semester on Tuesday the 9th April 2019 between 10-12pm in LG.12 in the O'Reilly Institute.