

CSU33032 Project 2

Securing Social Media Applications

The aim of this project is to develop a secure social media application for Facebook, Twitter, WhatsApp etc., or for your own social networking app. For example, your application will secure the Facebook Wall, such that only people that are part of your “Secure Facebook Group” will be able to decrypt each other’s posts. To all other users of the system the post will appear as ciphertext.

You are required to design and implement a suitable key management system for your application that allows any member of the group to share social media messages securely and allows you to add or remove people from a 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 through Blackboard.**
- ☐ You must also provide a **high-resolution video demonstration** of your work in **MP4** or **MOV** formats only. In the video (**max 5 mins**) you should demonstrate a working prototype, explain your design choices, talk through parts of your code which implement important aspects of your work. **Please ensure that the code is easily readable and do not talk over the video too quickly.**
- ☐ 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.**
- ☐ This project is worth 10% of the marks and will be graded out of 100 marks.

Deadline for submission is 23:59hrs on Sunday the 14th of April