* 1. What’s the problem you plan to solve?

We will attempt to encrypt ciphertext in an effort to ensure data security on the open web with the capability to use the data as if it was not encrypted. Additionally, we will try to measure encryption impact on the system (Ex: AWS, Google Cloud, & MS Azure) and to compare different cryptosystem performance.

* 1. What're the key challenges of your project?

Our initial challenge will be to understand how cryptosystems work. A portion of our preparation will be allocated to getting familiar with cryptographic tools and then be able to take ciphertext and conduct experiments like simple arithmetic. Our biggest challenge will be fully implementing our solution to the project.

* 1. What’s your plan for the project? Include a table for the milestones and due dates.

Here is our tentative project schedule below:

|  |  |
| --- | --- |
| **Task** | **Deadline** |
| Research & Analysis | 2-13-19 (2 weeks) |
| Cryptographic tools & testing | 2-27-19 (2 weeks) |
| Midterm Report & midterm presentation preparation | 3-6-19 (1 week) |
| Implementation | 3-20-19 (2 weeks) |
| Final presentation preparation | 4-3-19 (2 weeks) |
| Final report & Peer reviews | 4-16-19 (approximately 2 weeks) |

* 1. Are there any special resources needed to guarantee the success delivery of the

project?

Most of all the resources are online so we believe that some guidance might be needed when something is not working properly.