

# Configuration Manual

MSc Research Project  
Cloud Computing

**Akash Kulkarni**  
Student ID: x21138419

School of Computing  
National College of Ireland

Supervisor: Shivani Jaiswal

**National College of Ireland**  
**MSc Project Submission Sheet**  
**School of Computing**



**Student Name:** AKASH KULKARNI  
**Student ID:** X21138419  
**Programme:** MSc. Cloud Computing **Year:** 2022-2023  
**Module:** Research Project  
**Lecturer:** Shivani Jaiswal  
**Submission Due Date:** 15<sup>th</sup> December 2022  
**Project Title:** Asymmetric Encryption and Blockchain based Multi-keyword Encrypted Search  
**Word Count:** 187 **Page Count:** 4

I hereby certify that the information contained in this (my submission) is information pertaining to research I conducted for this project. All information other than my own contribution will be fully referenced and listed in the relevant bibliography section at the rear of the project.

ALL internet material must be referenced in the bibliography section. Students are required to use the Referencing Standard specified in the report template. To use other author's written or electronic work is illegal (plagiarism) and may result in disciplinary action.

**Signature:** Akash Kulkarni  
**Date:** 14<sup>th</sup> December 2022

**PLEASE READ THE FOLLOWING INSTRUCTIONS AND CHECKLIST**

Attach a completed copy of this sheet to each project (including multiple copies)	<input type="checkbox"/>
<b>Attach a Moodle submission receipt of the online project submission,</b> to each project (including multiple copies).	<input type="checkbox"/>
<b>You must ensure that you retain a HARD COPY of the project,</b> both for your own reference and in case a project is lost or mislaid. It is not sufficient to keep a copy on computer.	<input type="checkbox"/>

Assignments that are submitted to the Programme Coordinator Office must be placed into the assignment box located outside the office.

<b>Office Use Only</b>	
Signature:	
Date:	
Penalty Applied (if applicable):	

# Configuration Manual

Akash Kulkarni  
Student ID: x21138419

## 1 Environment Setup

- Install Golang from: <https://go.dev/doc/install>
- Make Sure GOPATH is properly setup.
- Install mongoDB OR setup a mongoDB atlas account:  
<https://account.mongodb.com/account/login>

## 2 Code Setup

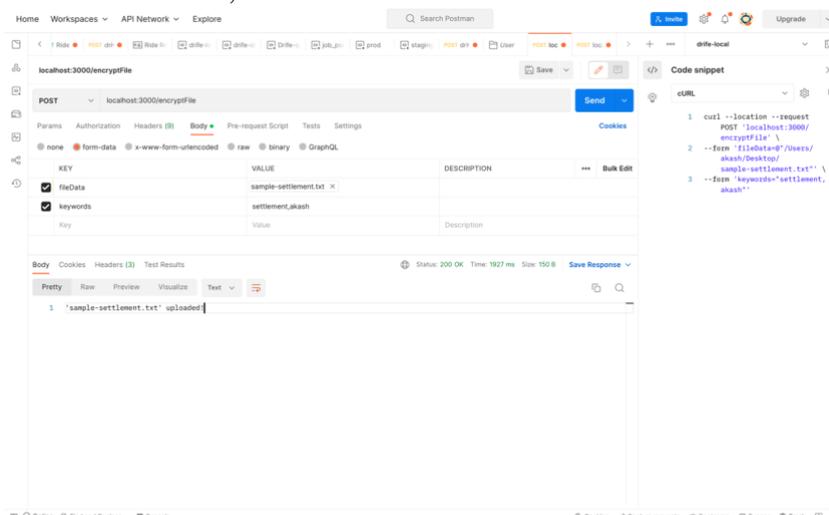
- Clone code from github OR unzip code folder in your local directory
- Create .env file and copy the contents from env sample file provided
- Once done that create aebmes collection in your mongoDb cloud or local
  - Set MONGOURI=<> and replace with MONGOURI="" (link from mongoDB atlas)
- Run following command "go run main.go" inside your code repository: this will run the code on 3000 port in your local machine

## 3 Run The code:

First install postman or you can run the curl commands directly given below

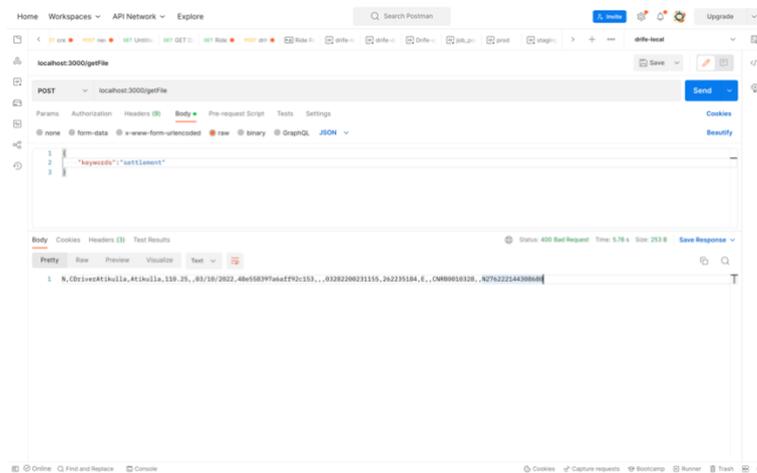
- For encryption: For now just .txt files only for testing with less size

```
curl --location --request POST 'localhost:3000/encryptFile' \  
--form 'fileData=@"/Users/akash/Desktop/sample-settlement.txt"' \  
--form 'keywords="settlement,akash"'
```



ii. For Decrypting file

```
curl --location --request POST 'localhost:3000/getFile' \  
--header 'Content-Type: application/json' \  
--data-raw '{  
  "keywords": "settlement"  
}'
```



The output of the text will be seen in response of the request. It will be same as of file uploaded.