Project Analysis

Presentation

Web Defacement Monitoring Tool
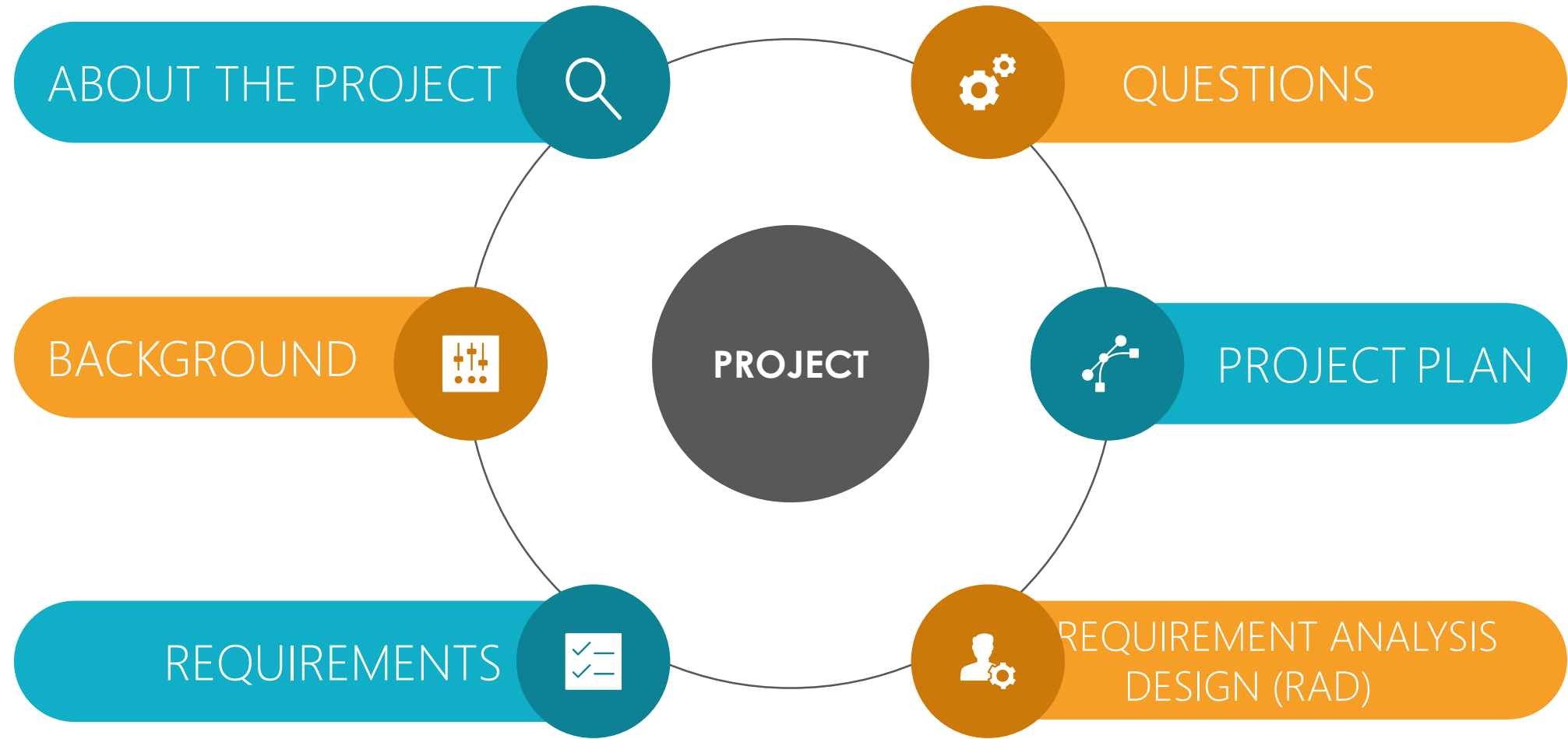
Greetings!

I am Jia-Cong (Johnny) Hou

Currently studying Honours
You can find me in the WinLab E2

Overview

ABOUT THE PROJECT

QUESTIONS

BACKGROUND

PROJECT PLAN

REQUIREMENTS

REQUIREMENT ANALYSIS DESIGN (RAD)

PROJECT

About The Project

What
Educate the student about web defacement and security

How
Design, Code and Implement a Web Defacement Monitoring Tool

Who
Me, myself and I

Supervisor
Dr Michael Norman

Co-supervisor CSIR
Muyowa Mutemwa

Background

US Department of Justice

1996 Website Defaced

SA Presidency government

2018 July 7 Website Defaced
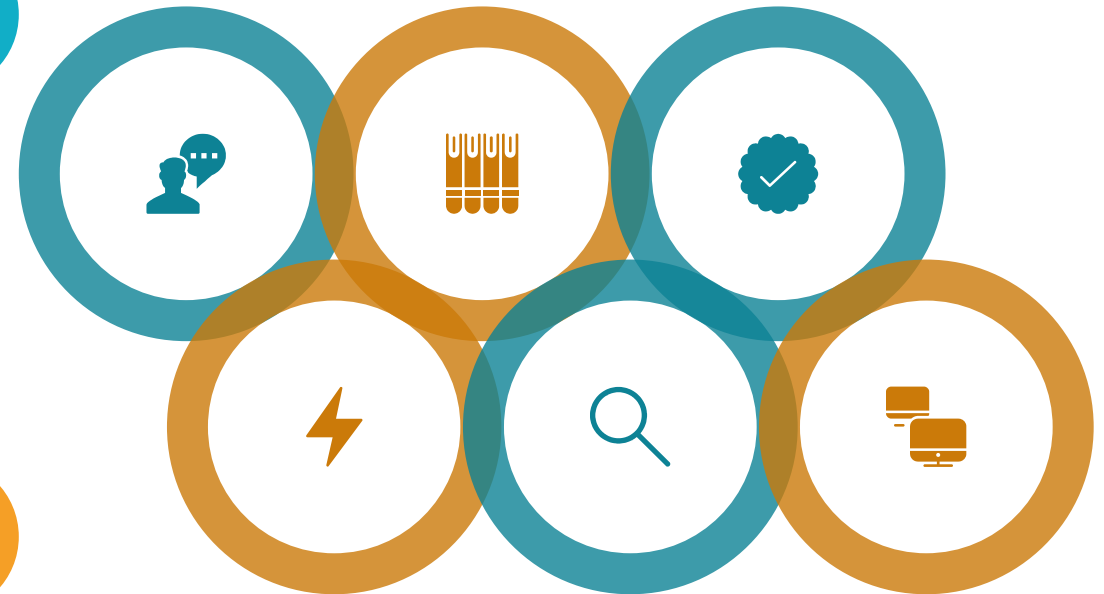
Background

Humiliation and damage to reputation

Services disruption and information unavailable

Potential data breach

Objective

What must I do ?

Web Defacement Monitoring Tool

User Requirements

Web Administrator

Website with media content ✓

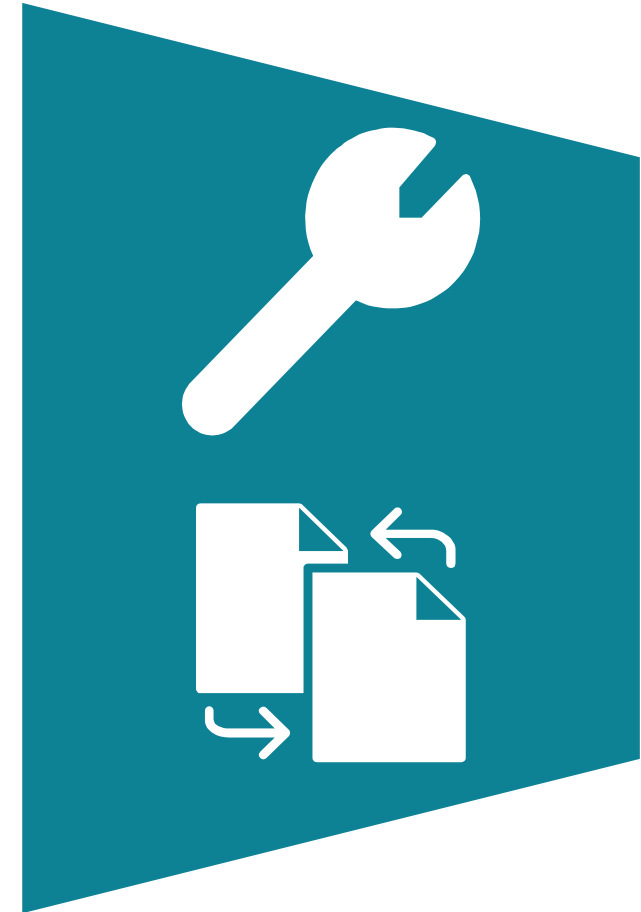Linux operating system ✓

Install Python 3.7.3 ✓

./WDMT.py ✓

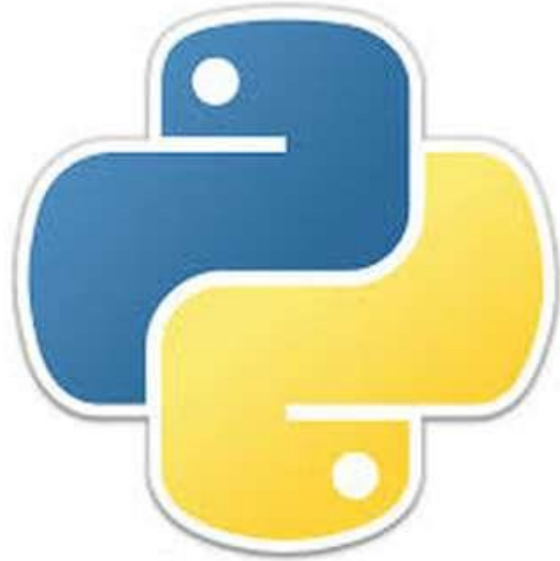# Requirements Analysis Design

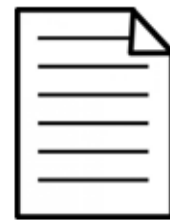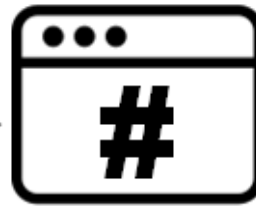**Backup**

Detect

Restore

Friendly "Neighborhood"

Hashing Algorithm

Plain Text → Hash Function → Hashed Text

Project Plan

Term 1

- Project Analysis
- Requirements
- Requirement Analysis Design
- Project Plan
- Presentation

Term 2

- Project Design and Development
- Coding the WDMT
- Prototype and GUI in Report form
- Presentation

Term 3

- Project Implementation
- Test the WDMT
- Host (Maybe?) and Implement
- Demo
- Presentation

Term 4

- Project Testing, Evaluation and Presentation
- *Improvise, Adapt and Overcome*
- Presentation

Reference

- [1] M. Masango, F. Mouton, P. Antony and B. Mangoale, "Web Defacement and Intrusion Monitoring Tool: WDIMT," September 2017.

- [2] D. Dorothy, "Georgetown Journal of International Affairs," *The Rise of Hacktivism*, 2015 September 2015.

- [3] M. Mxolisi, "Presidency website up and running after hacking attack," News24, 7 July 2018. [Online]. Available: https://www.news24.com/SouthAfrica/News/breaking-presidency-website-hacked-20180707. [Accessed 6 March 2019].

- [4] N. Mphathi, "SA Presidency website hacked," Independent Online (IOL), 11 July 2018. [Online]. Available: https://www.iol.co.za/dailynews/news/sa-presidency-website-hacked-15950026. [Accessed 6 March 2019].

- [5] E. E. Enaw and D. Pagou Prosper, "A Conceptual Approach to Detect Webdefacement Through Artificial Intelligence," *International Journal of Advanced Computer Technology (IJACT)*, vol. 3, no. 6, pp. 77-83.

- [6] K. Tushar, "Implementing a Web Browser with Web Defacement," *World of Computer Science and Information Technology Journal (WCSIT)*, vol. 1, no. 7, pp. 307-310, 2011.

Thank You