

# Project Plan

DOCUMENT CLASSIFICATION SYSTEM  
BY ACUMEN

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# Background

Living in the world of big data, data collection seems never be a problem for people anymore. Whatever we search, there are always plenty of data on the internet. However, the existence of astonishing amount of data creates additional difficulties on pinpointing the information we desire among the sea of data. Aiming to settle this problem, our group decides to develop a program which takes articles in plain text as input, and makes accurate predictions about the classification of this article. By attaching classification information to articles, people will be able to locate their desired articles with less trouble.

## Project Description

Firstly, as a student majored in Computer Science, our program focuses on classification of technology news. Moreover, to improve the correctness of clustering result, we will implement various data mining techniques during development. Not only can user classify article, they can also establish their own clustering dictionary and categories with the help of our program.

## Goals and Objectives

Nowadays, huge amount of information come out everyday. People are busy and may not be able to get every piece of information, so we need a program that can make it easy for us to locate our desired posts, and can provide us with concise summarisations for news posts. This may improve the efficiency of getting information in this information world.

- To make it easy for users to locate their desired post
- To provide users concise summarizations for news posts
- To practice software development methodology

# Scope

## Scope Definition

The project will introduce the following technology

- Key words dictionary generation
- Information Gain Calculation
- Automatic sorting

## Stakeholders

Stakeholder Register				
Name	Project Role	Internal/External	Position	Contact Information
Mingyang WANG	Project Manager	Internal	Manager	<a href="mailto:mingywang3-c@my.cityu.edu.hk">mingywang3-c@my.cityu.edu.hk</a>
Jie PU	Assistant Project Manager	Internal	Manager	<a href="mailto:jiepu2-c@my.cityu.edu.hk">jiepu2-c@my.cityu.edu.hk</a>
Zhou FANG	Configuration Manager	Internal	Manager	<a href="mailto:zfang6-c@my.cityu.edu.hk">zfang6-c@my.cityu.edu.hk</a>
Xikang FENG	Team Member	Internal	Developer	<a href="mailto:xikanfeng2@gmail.com">xikanfeng2@gmail.com</a>
Yiji WANG	Team Member	Internal	Developer	<a href="mailto:yijiwang3-c@my.cityu.edu.hk">yijiwang3-c@my.cityu.edu.hk</a>
Renjie ZHU	Team Member	Internal	Developer	<a href="mailto:renjiezhu2-c@my.cityu.edu.hk">renjiezhu2-c@my.cityu.edu.hk</a>
Dr. W.K.Chan Ricky	Project Supervisor	External	President	<a href="mailto:wkchan@cityu.edu.hk">wkchan@cityu.edu.hk</a>

# Methodology

## Software Development Methodology

In this project, we chose test-driven development as our development methodology. It is the method that divide the project into small test cases, which drive the software to pass all the test cases. This method can lead to simple designs in this project. Object-oriented programming paradigm is applied in this project.

## Development tools

We use several development tools in this project. The main development software is Eclipse, because we use Java as the language of our software. Additionally, we chose Github for easier configuration management, which will control the version of the software, and reduce the possibility of chaos.

## Team Organization

We are assigned different roles among different cycles of the development of the program. Each member of the team will experience different roles in the process, and take charge of different processes throughout the project.

## Milestones

Project charter signed by Sep. 12<sup>th</sup>, 2014

Project plan approved by Sep. 19<sup>th</sup>, 2014

1<sup>st</sup> Iteration by Oct. 16<sup>th</sup>, 2014

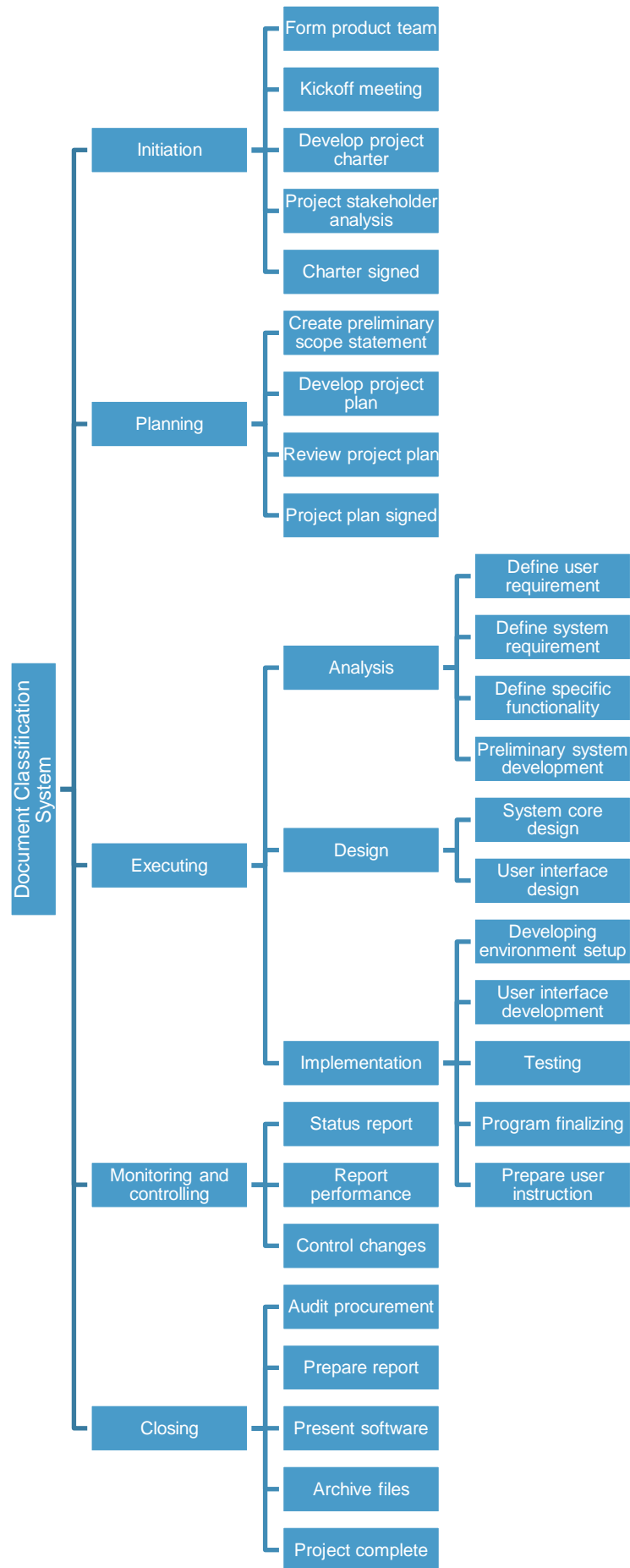
2<sup>nd</sup> Iteration by Nov. 12<sup>th</sup>, 2014

3<sup>rd</sup> Iteration by Dec. 3<sup>rd</sup>, 2014

Project Completed by Dec. 4<sup>th</sup>, 2014

# Work Breakdown Structure

1. Project
  - 1.1. Initiation
    - 1.1.1. Form product team
    - 1.1.2. Kickoff meeting
    - 1.1.3. Develop project charter
    - 1.1.4. Project stakeholder analysis
    - 1.1.5. Charter signed
  - 1.2. Planning
    - 1.1.1. Create preliminary scope statement
    - 1.1.2. Develop project plan
    - 1.1.3. Review project plan
    - 1.1.4. Project plan signed
  - 1.3. Executing
    - 1.1.1. Analysis
      - 1.1.1.1. Define user requirement
      - 1.1.1.2. Define system requirement
      - 1.1.1.3. Define specific functionality
      - 1.1.1.4. Preliminary system development
    - 1.1.2. Design
      - 1.1.2.1. System core design
      - 1.1.2.2. User interface design
    - 1.1.3. Implementation
      - 1.1.3.1. Developing environment setup
      - 1.1.3.2. User interface development
      - 1.1.3.3. Testing
      - 1.1.3.4. Program finalizing
      - 1.1.3.5. Prepare user instruction
  - 1.4. Monitoring and controlling
    - 1.1.1. Status report
    - 1.1.2. Report performance
    - 1.1.3. Control changes
  - 1.5. Closing
    - 1.1.1. Audit procurement
    - 1.1.2. Prepare report
    - 1.1.3. Present software
    - 1.1.4. Archive files
    - 1.1.5. Project complete



# Project Schedule

<div> <div>Fri 14/9/5</div> <div> <div>14 Sep 8</div> <div>14 Sep 15</div> <div>14 Sep 22</div> <div>14 Sep 29</div> <div>14 Oct 6</div> <div>14 Oct 13</div> <div>Sun 14/10/19</div> </div> </div>							
<div> <div>Start</div> <div>Fri 14/9/5</div> </div>							
	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resources
1		Project Kickoff Meeting	0 days	Fri 14/9/5	Fri 14/9/5		
2		Requirement Gathering	5 days	Fri 14/9/5	Thu 14/9/11	1	
3		Project Charter Signoff	1 day	Fri 14/9/12	Fri 14/9/12	2	
4		Project Iteration 1	24 days	Mon 14/9/15	Thu 14/10/16		
5		Project Plan	4 days	Mon 14/9/15	Thu 14/9/18		
6		WBS Setup	4 days	Mon 14/9/15	Thu 14/9/18	3	
7		Gantt Chart Preparation	2 days	Mon 14/9/15	Tue 14/9/16	3	
8		Design	10 days	Fri 14/9/19	Thu 14/10/2		
9		System Design	4 days	Fri 14/9/19	Wed 14/9/24	6, 7	
10		Detailed Design	6 days	Thu 14/9/25	Thu 14/10/2	9	
11		Implementation	9 days	Fri 14/10/3	Wed 14/10/15		
12		Implement Dictionary	9 days	Fri 14/10/3	Wed 14/10/15	8	
13		Implement Information Gain Calculator	9 days	Fri 14/10/3	Wed 14/10/15	8	
14		Release 1	1 day	Thu 14/10/16	Thu 14/10/16	5, 8, 11	
15		Project Iteration 2	19 days	Fri 14/10/17	Wed 14/11/12		
16		Design Refactoring	9 days	Fri 14/10/17	Wed 14/10/29	14	
17		Code Refactoring	10 days	Thu 14/10/30	Wed 14/11/12	16	
18		Preparing documentation	14 days	Fri 14/10/17	Wed 14/11/5	14	
19		Release 2	1 day	Thu 14/11/6	Thu 14/11/6	18	
20		Project Iteration 3	19 days	Fri 14/11/7	Wed 14/12/3		
21	英	Design Refactoring	8 days	Fri 14/11/7	Tue 14/11/18	19	
22		Code Refactoring	6 days	Wed 14/11/19	Wed 14/11/26	21	
23		Preparing User Manual	3 days	Fri 14/11/7	Tue 14/11/11	19	
24		Documentation Finalizing	4 days	Thu 14/11/27	Tue 14/12/2	22, 23	
25		Release 3	1 day	Wed 14/12/3	Wed 14/12/3	24	
26		Project Finish	1 day	Thu 14/12/4	Thu 14/12/4	25	



# Gantt Chart

