## WITS UNIVERSITY

### SCHOOL OF ELECTRICAL AND INFORMATION ENGINEERING

ELEN7046 - Software Technologies and Techniques

# Group Assignment

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#### SUMMARY

This report presents the work done by Group 2 in response to the project brief for ELEN7046: Software Technologies and Techniques. The report will broadly focus on the following topics:

- The Methodology followed to execute the project;
- The Architecture of the solution developed for the project; and
- The different technologies used to deliver the solution.

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## 1 Introduction

TBC

- 2 Literature Review
- 3 Stakeholder Concerns Big Data
- 3.1 Collection
- 3.2 Processing
- 3.3 Visualization

## 4 Methodology

In order for group two to successfully deliver this project, a development methodology based on IBM Rational Unified Process (RUP) was followed albeit tailored to cater for the specific needs of this project.

The diagram below depicts the IBM RUP model:

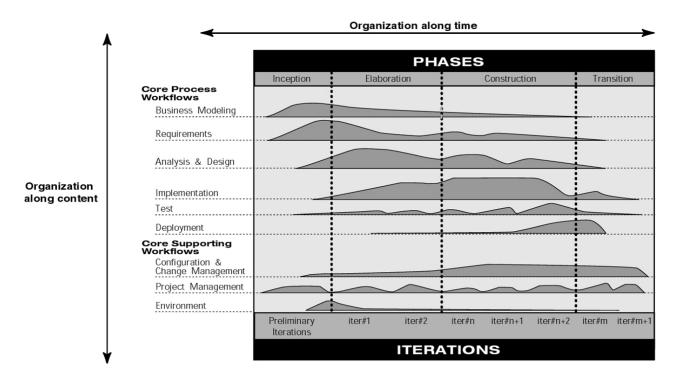


Figure 1: IBM Rational Unified Process (Source: RUP, Best Practices for Software Development Teams)

## 5 Assumptions and Constraints

#### 5.1 Tweet Locations

The group encountered tweet location issues.

#### 5.2 Pros and Cons determinations

Rudimentary algorithm for determining Twitter statements (tweets) that are against or for a particular candidate was adopted...

## 6 Success Criteria

## 7 Architecture of the Solution

## 7.1 High Level Design: Component Architecture

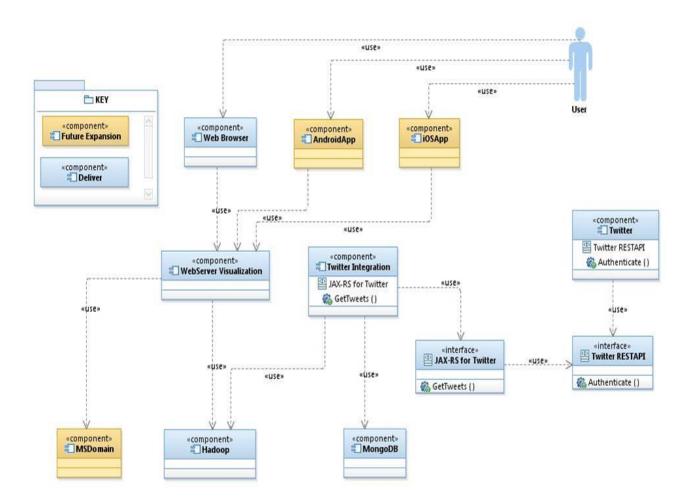


Figure 2: High Level Component Model.

## 7.2 Detailed Design: Class Diagrams

#### 7.3 Operational Model: Infrastructure Design

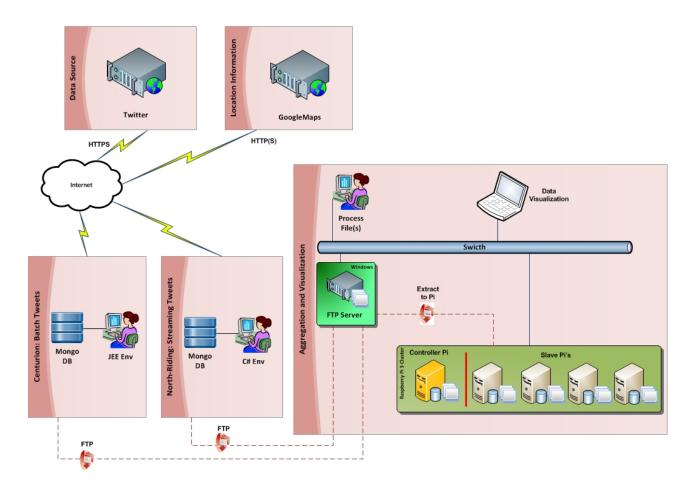


Figure 3: Operational Model: Physical

• Personnel Shortfall: Inexperience in the management team is a potential risk, due to the possible oversight and inaccuracies. Leach does not have sufficient IS Management experience (pg 502 paragraph 4), the project may suffer if leach continues at his current position

## 8 Conclusion

### 8.1 Control Situation

Before we come to a conclusion and define the proposed actions we must first define the archetypical control situation. Based on..

## References

[Van Vliet, 2008] Van Vliet (2008). Software Engineering Principles and Practice [Frederick P. Brooks, 1975] Frederick P. Brooks (1975). The Mythical Man-Month