**MAKERERE UNIVERSITY**

COLLEGE OF COMPUTING AND INFORMATION SCIENCES

DEPARTMENT OF NETWORKS

BACHELOR OF SCIENCE IN SOFTWARE ENGINEERING (YEAR 2)

RECESS TERM 2 (BSE 2301)

FINAL PROJECT REPORT FOR:

**STARWARS MOVIE SCRIPT ANALYSIS PROJECT**

VERSION 1.0.0

**PROJECT MEMBERS (GROUP 24)**

|  |  |  |  |
| --- | --- | --- | --- |
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# Introduction

Star Wars Movie Script Analysis is the project undertaken as a mandatory requirement for the course “Distributed Software Development” that is conducted at Makerere University in Uganda. The aim of the course is to provide an in-depth understanding of the R programming language and data analysis. In this project we have to analyze the Star Wars movie scripts for episodes IV, V and VI, perform data mining and sentimental analysis on the scripts and produce the outcome in an orderly way and simple to understand through multiple visuals including graphs, wordclouds and other types of plots. We are working in a group of four people.

## Purpose of this document

In this document there is overall description of the Star Wars Movie script analysis system. It includes what we did. There is also description of the work experience gain from this project. Whole description of the designing face and cost is included in this document.

## Intended Audience

All those in the quest for the analysis of the Star Wars movie from episode four to episode six. Those who would like to continue with the learning and improving their skills in data analysis, this project would be a good kick start.

## Scope

The project is aimed to provide data mining and sentimental analysis of the Star Wars movie script for episode IV, V, VI only and is developed in R language. It therefore is a web application that should be compatible with majority of browsers to provide user friendly Interface for all the users and the interface is designed in English language.

## Definitions and acronyms

### Definitions

|  |  |
| --- | --- |
| **Keyword** | **Definitions** |
| Sentimental analysis | The use of natural language processing, text analysis, computational linguistics, and biometrics to systematically identify, extract, quantify, and study affective states and subjective information. |
| Data mining | The practice of examining large pre-existing databases in order to generate new information |

## References

# “Star Wars Movie Script Analysis” Final Project document.

<https://doi.org/10.1080/19312458.2017.1387238>

<https://doi.org/10.1080/19312458.2017.1387238>

<https://www.kaggle.com/xvivancos/>

Using R for Data Analysis and Graphics Introduction, Code and Commentary by J H Maindonald

<http://tamaszilagyi.com/blog/a-tidy-text-analysis-of-rick-and-morty/>

# Background and Objectives

The customer needs Microsoft Project (MSP) as Web Base Project to handle the Different projects in any kind of Software House. It was previously developed by Microsoft for project Management. Bit was not the Web Based so here we made it as a Web Based.

Now we developed a project in which is just like MS Project. Here we have four main actors in the project i.e. Administrator, Project Leader, Project Member and user. There are different roles of all the actors depending on their positions. There are different main activities in the project like View, Delete and Edit different thins regarding to the Project.

# Organization

## Project Supervisor

Kange Noah is the project supervisor

## Group Leader

Wavamuno Brandon Elijah is the Manager of the developing group.

## Project Group

|  |  |
| --- | --- |
| **Name** | **Responsibility** |
| Wavamuno Brandon Elijah | Group leader, Analysis, Implementation, user interface designing and server script design.. |
| Mukamba Joseph | Implementation, Documentation, Analysis. |
| Mugeni Henry Aggrey | Implementation, Documentation, user interface design, Analysis |
| Mugoya Reymond Stephen | Integration, Implementation, Analysis, Documentation, Analysis |

## Others

Kange Noah Lubale

# Milestones

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Id** | **Milestone Description** | **Responsible Dept./Initials** | **Finished week** | | | | **Metr** | **Rem** |
| **Plan** | **Forecast** | | **Actual** |
| **Week** | **+/-** |
| M-001 | Project description and plan |  | 18-05-18 | 1 | 0 | 18-05-18 | Y | Good |
| M-002 | Requirement Definition |  | 25-05-18 | 2 | 0 | 25-05-18 | Y | Good |
| M-004 | Project Design |  | 27-05-18 | 2 | 0 | 27-05-18 | Y | Good |
| M-005 | Revised Project Plan |  | 30-05-18 | 2 | 0 | 30-05-18 | Y | Good |
| M-006 | Project status presentation |  | 10-06-18 | 3 | 0 | 10-06-18 | Y | Good |
| M-007 | Final presentation and delivery |  | 18-06-18 | 4 | 0 | 18-06-18 | Y | Excellent |

# Project Results

A complete documented web based Star Wars movie script analysis software

## Requirements

### Requirement Compliance Matrix

|  |  |  |  |
| --- | --- | --- | --- |
| **Id** | **Requirement Description** | **completed** | **Rem** |
| Web-1 | System Administration Requirements | Yes |  |
| Web -1.1 | Administrator should login to do any specific task on the GitHub and see the progress of the project. | Yes |  |
| Web -1.2 | Administrator should be able to adjust system parameters. | Yes |  |
| Web -1.3 | Administrator should be able to add/ modify/ enable/ disable/ delete system users. | Yes |  |
| Web -1.4 | Administrator should be able to add/ modify/ archive/ delete projects. | Yes |  |
| Web -1.5 | Administrate project leaders for existing projects. | Yes |  |
| Web -1.6 | Comments to different members. | Yes |  |
| Web -2 | Project leader Requirements. | Yes |  |
| Web -2.1 | Project leader should be able to define baseline plan. | Yes |  |
| Web -2.2 | Project leader should be able to manage project group. | Yes |  |
| Web -2.3 | Project leader should be able to monitor individual work. | Yes |  |
| Web -2.4 | Project leader should be able to define milestones, activities, resources & financial plans etc… | Yes |  |
| Web -2.5 | Project leader should be able to freeze work done report at the end of the week after finalizing the week plan. | Yes |  |
| Web -2.6 | Project member should be able to submit week report. | Yes |  |

*Completed: Yes (completely implemented)*

### Requirements Compliance Summary

|  |  |
| --- | --- |
| Total number of requirements | 19 |
| Number of requirements implemented | 18 |
| Requirements partially fulfilled | 0 |
| Requirements not fulfilled | 0 |
| Requirements dropped | 2 |

## Work Products and Deliverables

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **To** | **Output** | **Planned week** | **Promised week** | **Late +/-** | **Delivered week** | **Rem** |
| Igore Cavrak | Project Description & Plan | **W01** | **W01** | No | **W01** | Fair |
| Igore Cavrak | Requirement Definition | **W01** | **W02** | No | **W02** | Good |
| Igore Cavrak | Project Design | **W02** | **W02** | No | **W02** | Good |
| Igore Cavrak | Revised Project Plan | **W03** | **W03** | No | **W03** | Good |
| Igore Cavrak | Project Status Presentation | **W03** | **W03** | No | **W03** | Good |
| Igore Cavrak | Final Presentation & delivery | **W04** | **W04** | No | **W04** |  |

# Project Experiences

## Positive Experiences

We have learnt how to work as a group and consulting and accepting the remarks given to us, good or bad remarks have all lead us to the positive direction to work better. Another thing we have from this project is how to use GitHub to control our software and also keep safe. We have also learnt the basics and some cores of the R language and the all new topic of data analysis which we had no idea about.

## Improvement Possibilities

We have experienced that projects should always be moved as planned to not fall into the trap of not finishing them and everyone should perform their given tasks in time to not affect the progress of the project.

# Financials

## Project Cost Summary.

Most of the software used for this project has been free and has provided by the project manager/supervisor. Some of the software has been freely downloaded from the internet. Most of the costs incurred have been for printing the documents that the project needed to be fully professional.

|  |  |
| --- | --- |
| Planned Cost | 20,000UGX |
| Actual Cost | 16,000 UGX |

# Metrics

## Milestone Metrics

|  |  |  |
| --- | --- | --- |
| Completed as planned or earlier | Total | Timeliness |
| 4 | 4 | Achieved |

## Effort Metrics

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity** | **Actual Effort** | **Planned Effort** | **Deviation (%)** |
| Concept paper | 75 | 80 | -6.25 |
| Requirements Analysis | 85 | 100 | -15 |
| System Design | 97 | 110 | -11.81 |
| System Development | 180 | 220 | -18.18 |
| Implementation | 450 | 500 | -10 |
| Integration | 150 | 100 | 50 |
| Testing | 200 | 150 | 33.33 |
| **Total** | **1237** | **1260** | **22.09** |

|  |  |
| --- | --- |
| **Effort estimation accuracy (%)**  *(100\*(1 - abs(Actual – Planned)/Actual))* | 98.14% |