**MAKERERE UNIVERSITY**

COLLEGE OF COMPUTING AND INFORMATION SCIENCES

DEPARTMENT OF NETWORKS

BACHELOR OF SCIENCE IN SOFTWARE ENGINEERING (YEAR 2)

RECESS TERM 2 (BSE 2301)

PROJECT REPORT FOR:

ANALYSIS ON FIFA 18 DATASET

**PROJECT MEMBERS (GROUP 10)**

|  |  |  |  |
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**PROJECT LEADER**

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SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE

SOFTWARE ENGINEERING RECESS PROJECT BSE 2301

19TH JULY, 2018

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# 1. Introduction [1].

As the world is rapidly moving towards the field of data science, so as to meet the basic necessity we need to get the affinity to analyze some useful datasets. The project is entitled the ‘FIFA 18 analysis system and is undertaken as a mandatory requirement for the course “BSSE” as a group of four that is being conducted mutually by MUK.

The purpose of this project was the design of an analysis system for the FIFA 18. The system was designed to meet specifications that were set to ensure that the system would be able to analyze, visualize and predict possible outcomes

## 1.1 Purpose

The purpose of the FIFA 18 analysis system is to present a comprehensive analysis of the results of the data from each component FIFA 18 dataset, and other pertinent available studies. The findings of this analysis of the data are used to develop conclusions and recommendations for future analysis. This report provides overall description of the FIFA 18 analysis project and work experience gained, a budget summary for the whole project.

## 1.2 Intended Audience [2].

We expect the intended audience for this report to be our group 10 members; the recess supervision team MUK including those involved in the final awarding marks panel; those from outside the MUK who are working in a similar area.

## 1.3 Scope

This document should provide the intended audience with the summary of all information that are important in this project [3].

## 1.4 Definitions and Acronyms

### 1.4.1 Definitions

|  |  |
| --- | --- |
| **Keyword** | **Definitions** |
| Distributed software Development | Process in which the software is being developed by different teams working at least 30 m apart physically. |

### 1.4.2 Acronyms and Behaviors

|  |  |
| --- | --- |
| **Acronym or**  **Abbreviation** | **Definitions** |
| MUK | Makerere University Kampala |
| BSSE | Bachelor of Science in Software Engineering |
| I.e. | That is to say |

# 2. Background and objectives

An analysis system such as FIFA 18 analysis system are very helpful in data science projects, and will help analysts to easily get insights from the FIFA 18 dataset and provides the project members and other programmers with access to a common code base.

Our target audience needs FIFA 18 analysis system as Web Base Project to handle the Different analysis in any kind of web browser. 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 Customer. There are different roles of all the actors depending on their positions. There are different main activities in the project like analysis, visualize, predict and view the entire FIFA 18 datasets regarding to the Project.

# 3. Organization

## 3.1 Project Manager

Muwonge Emmanuel

## 

## 3.2 Project Group

|  |  |
| --- | --- |
| Name | Responsibility |
| Muwonge Emmanuel | Project manager, Documentation, Data cleaning, Analysis, Supervision, Visualization, Implementation, Integration , Testing, Predictions, Design |
| Sunday Deogratias | Implementation, Documentation, Analysis, Designing: Documentation, Data cleaning, Analysis, Supervision, Visualization , Implementation, Integration, Testing, Design |
| Wamboli Josephat | Implementation, Documentation, Designing, Analysis, DB Design: Documentation, Data cleaning, Analysis, Supervision, Visualization, Implementation, Integration, Testing, Predictions, DB Design, Design |
| Ajambo Catherine | Implementation, Analysis, Documentation: Documentation, Data cleaning, Analysis, Implementation, Supervision, Visualization, Integration, Testing, Design |

## 3.3 Steering Group

Mr. Mbabazi Isaac.

Mr. Kange Noah.

## 3.4 Customer

All fans of FIFA video game and data scientists.

## 3.5 Others

Other recess 2 groups i.e. fellow course mates

# 

# 4. Milestone

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Id | Milestone Description | Responsible Dept./Initials | Finished week | | | | Metr | Rem |
| Plan | Forecast | | Actual |
| Week | +/- |
| M-001 | Concept Paper |  | 20-06-2018 | 0 | 0 | 20-06-2018 | Y | V.Good |
| M-002 | Software Requirements Specification |  | 27-06-2018 | 0 | 0 | 27-06-2018 | Y | V.Good |
| M-003 | System Design Document |  | 04-07-2018 | 0 | 0 | 04-07-2018 | Y | V.Good |
| M-004 | System Implementation |  | 20-07-2018 | 0 | -2 | 18-07-2018 | Y | V.Good |
| M-005 | Project Status Presentation |  | 18-07-2018 | 0 | 0 | 18-07-2018 | Y | Excellent |
| M-006 | Final Presentation & delivery |  | 27-07-2018 | 0 | -2 | 25-07-2018 | Y | Excellent |

## 4.1 Remarks

|  |  |
| --- | --- |
| **Remark Id** | **Description** |
| R-001 | It was good experience to do our first documentation of this recess. |
| R-002 | It’s about describing how our client wanted our system to be. |
| R-003 | We described how the design of our system depending on our clients’ needs/requests |
| R-004 | It’s a wonderful experience implementing our system in a distributed and version control environment i.e. GIT |
| R-005 | Most of the times we’d confident in our project and our supervisor was really pleased with our work. |
| R-006 | It’s an excellent and usual practice to present to our course mates and the judge panel what has kept us busy for the whole recess period. |

# 5. Project Results

## 5.1 Requirements

### 5.1.1 Requirement Compliance Matrix

|  |  |  |  |
| --- | --- | --- | --- |
| **Id** | **Requirement Description** | **Completed** | **Rem** |
| FIFA18-1 | System Administrator Requirements | Yes | V. Good |
| FIFA18-1.1 | Administrator should log in to do any specific task. | Yes | V. Good |
| FIFA18-1.2 | Administrator should add or delete users of the system. | Yes | V. Good |
| FIFA18-2 | Analysis Requirements | Yes | Excellent |
| FIFA18-2.1 | System should display Analysis results in table format. | Yes | Excellent |
| FIFA18-2.2 | System should visualize analysis by plotting graphs. | Yes | Excellent |
| FIFA18-2.3 | System should predict future outcomes based on analysis results. | Yes | Excellent |
| FIFA18-3 | System Users Requirements | Yes | Good |
| FIFA18-3.1 | Users should log in and out of the system. | Yes | V. Good |
| FIFA18-3.2 | Users should adjust analysis based on their preference. | Yes | Good |
| FIFA18-3.3 | Users should view all analysis results. | Yes | Excellent |

*Completed: Yes (completely implemented)*

*No (not implemented at all)*

*Partially (partially implemented, more description under Remarks subsection)*

*Unknown (completion status not known)*

*Dropped (requirement was dropped during the course of the project)*

### 5.1.2 Requirements Compliance Summary

|  |  |
| --- | --- |
| Total number of requirements | 8 |
| Number of requirements implemented | 8 |
| Requirements partially fulfilled | 0 |
| Requirements not fulfilled | 0 |
| Requirements dropped | 0 |

### 5.1.3 Remarks

|  |  |
| --- | --- |
| **Remark Id** | **Description** |
| R-001 | It was good experience to do our first documentation of this recess. |
| R-002 | It’s about describing how our client wanted our system to be. |
| R-003 | We described how the design of our system depending on our clients’ needs/requests |
| R-004 | It’s a wonderful experience implementing our system in a distributed and version control environment i.e. GIT |
| R-005 | Most of the times we’d confident in our project and our supervisor was really pleased with our work. |
| R-006 | It’s an excellent and usual practice to present to our course mates and the judge panel what has kept us busy for the whole recess period. |

## 5.2 Work Products and Deliverables

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **To** | **Output** | **Planned week** | **Promised week** | **Late +/-** | **Delivered week** | **Rem** |
| Mr. Mbabazi Isaac | Concept Paper | W25 | W25 | No | W25 | V. Good |
| Mr. Mbabazi Isaac | Software Requirement Specification | W26 | W26 | No | W26 | V. Good |
| Mr. Mbabazi Isaac | System Design Document | W27 | W27 | No | W27 | V. Good |
| Mr. Mbabazi Isaac | System Implementation | W29 | W29 | No | W29 | Excellent |
| Mr. Mbabazi Isaac | Project Status Presentation | W29 | W29 | No | W29 | Excellent |
| Presentation Panel | Final Presentation and delivery | W30 | W30 | No | W30 | Excellent |

### 5.2.1 Remarks

|  |  |
| --- | --- |
| **Remark Id** | **Description** |
| R-001 | It was good experience to do our first documentation of this recess. |
| R-002 | It’s about describing how our client wanted our system to be. |
| R-003 | We described how the design of our system depending on our clients’ needs/requests |
| R-004 | It’s a wonderful experience implementing our system in a distributed and version control environment i.e. GIT |
| R-005 | Most of the times we’d confident in our project and our supervisor was really pleased with our work. |
| R-006 | It’s an excellent and usual practice to present to our course mates and the judge panel what has kept us busy for the whole recess period. |

# 6.1 Project Experiences

## 6.1.1 Positive Experiences

Working on this FIFA18 Data Analysis project enhanced our abilities of team work. We also learnt the R language on top of a new experience of Data analysis using R Studio.

## 6.2 Improvement possibilities

With this experience of data analysis, we have got, if we continue with the spirit we can become better data scientists and solve the problem of inadequate data scientists in Uganda. We have experience that if we will organize our resource according to requirements then we can make project more successful.

# 7. Financials

## 7.1 Project Cost Summary.

|  |  |
| --- | --- |
| Planned Cost. | 50,000 UGShs |
| Actual Cost. | 20,000 UGShs |

7.2 Work per Member.

Every member in the group was given a module to work on such as the LOGIN PAGE, CREATING A DATABASE, ANALYSIS, VISUALIZATION, PREDICTIONS and so on. The work was then combined together to come up with the complete system of the analysis.

# 8. Metrics

## 8.1 Milestone Metrics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Planned Finish Date** | **Actual Finish Date** | **Variance**  **(in days)** | **On Schedule** | **Ahead of Schedule** | **Behind Schedule** |
| 27-07-2018 | 19-07-2018 | 8 |  | **√** |  |

## 8.2 Effort Metrics [5].

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity** | **Actual Effort** | **Planned Effort** | **Deviation (%)** |
| Documentation | 4 | 4 | 0 |
| Cleaning the Dataset | 4 | 4 | -75 |
| Design | 4 | 4 | 0 |
| Analysis | 4 | 4 | 0 |
| Advice from Supervisor | 4 | 4 | 0 |
| Visualization | 4 | 4 | 0 |
| Predictions | 2 | 4 | -50 |
| Database Design | 1 | 4 | -75 |
| Implementation | 4 | 4 | 0 |
| Integration | 4 | 4 | 0 |
| Testing | 4 | 4 | 0 |
| **Total** | **39** | **44** | **-200** |

|  |  |
| --- | --- |
| **Effort estimation accuracy (%)**  *(100\*(1 - abs(Actual – Planned)/Actual))* | **87.18%** |

# 

# 9. References

1. <https://www.scribd.com/doc/27154173/Project-Report-Sample>

2. <http://www.therightplace.net/jp/secs1-3.html>

3.<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=16&cad=rja&uact=8&ved=0ahUKEwivte7A8arcAhWDaFAKHaT2C9EQFgidATAP&url=https%3A%2F%2Fwww.fer.unizg.hr%2F_download%2Frepository%2FCVSQL_Final_Project_Report.doc&usg=AOvVaw0kjicN-b152kAjd7s69zZO>

4.https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=2ahUKEwiAxb6G6arcAhXLEVAKHcdGANYQFjABegQICxAE&url=https%3A%2F%2Fcarleton.ca%2Fits%2Fproject-office%2Fwp-content%2Fuploads%2FProjectFinalReportTemplate.docx&usg=AOvVaw3QBgTdlTuL\_qqbxdBNgiuB