Recess R project

|  |  |
| --- | --- |
| Web Project | Version: 1 |
| Final project Report | Date: 2018-07-21 |
|  | |

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 2002-00-00 | 0.01 | Initial Draft | Group12 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Introduction

R Recess Project is the project undertaken as a mandatory requirement for software engineering students in there second year. The aim of the course is to introduce students to R programming and data science concepts. In this course we have to develop a data science project. in our project we are working on a multisalient object model that uses a neural network to predict number of objects in a picture.

purpose of the document

In this document there is overall description of the Web Project. 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

There are some intended audiences of this project in which our steering group, customer , researchers and the Project members are included. There are also some students who want to continue this project later on.

Scope

This document gives a detailed description of the Roles and responsibilities of different stakeholders,milestones,Requirement Compliance Matrix and work experience of the MSO system. It specifies the duration for completing the structure and design of some of the modules discussed in the SRS.

## Definitions and acronyms

Definitions

|  |  |
| --- | --- |
| keyword | Definition |
|  |  |
|  |  |
|  |  |

### Acronyms and abbreviations

|  |  |
| --- | --- |
| Acronyms and abbreviations | Definition |
| R | Statistical programming language |
| MSO | Multi salient Object |

References

backgrounds and objectives

The objectives of the project are:

To develop a model that enhance salient objects detection uniformly meanwhile suppress irrelevant background.

To train the model to recognize image inputs

To train the model to differentiate between salient parts and irrelevant background parts of the image using a neural network

organization

## Project Manager

**Isabirye Taibu**  is the Manager of the group.

## Project Group

|  |  |
| --- | --- |
| Name | Responsibility |
| Isabirye Taibu |  |
| Nakiranda Proscovia |  |
| Nabuufu Ereth |  |
| K |  |

## Steering Group

## Customer

## Others

# Milestones

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Id** | **Milestone Description** | **Responsible Dept./Initials** | **Finished week** | | | | **Metr** | **Rem** |
| **Plan** | **Forecast** | | **Actual** |
| **Week** | **+/-** |
| M-001 | Project Description & Plan |  | 7-06-18 | 0 | 0 | 7-06-18 | Y | Good |
| M-002 | Requirement Definition |  | 14-06-18 | 0 | 0 | 14-06-05 | Y | Good |
| M-004 | Project Design |  | 24-06-18 | 0 | 0 | 24-06-18 | Y | Good |
| M-005 | Revised Project Plan |  | 18-07-18 | 0 | 0 | 18-07-18 | Y | Good |
| M-006 | Project Status Presentation |  | 20-07 | 0 | 0 | 20-07 | Y | Good |
| M-007 | Final Presentation & delivery |  | 25-07-18 | 0 | 0 | 25-07-18 | Y | Excellent |

Remarks

|  |  |
| --- | --- |
| **Remark Id** | **Description** |
| R-001 | It was good experience to give a Presentation on MSO |
| R-002 | Learning and applying shiny package for web was a rewarding experience |
|  |  |
|  |  |

# Project Results

## Requirements

### Requirement Compliance Matrix

|  |  |  |  |
| --- | --- | --- | --- |
| **Id** | **Requirement Description** | **completed** | **Rem** |
| Web-1 | System Administration Requirements | Yes |  |
| Web -1.1 |  | Yes |  |
| Web -1.2 |  | Yes |  |
| Web -1.3 |  | Yes |  |
| Web -1.4 |  | Yes |  |
| Web -1.5 |  | Yes |  |
| Web -1.6 |  | Yes |  |
| Web -2 |  | Yes |  |
| Web -2.1 |  | Yes |  |
| Web -2.2 | Image upload component | Yes |  |
| Web -2.3 | Image processing module | Yes |  |
| Web -2.4 | Display result component | Yes |  |
| Web -2.5 | Help component | Yes |  |
| Web -3 | portability | Yes |  |
| Web -4 | ensure quality image processin | Yes |  |
| Web -5 |  | Yes |  |
| Web -6 |  | Yes |  |
| Web -7 |  | Yes |  |
|  |  |  |  |

*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)*

### Requirements Compliance Summary

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

### Remarks

|  |  |
| --- | --- |
| **Remark Id** | **Description** |
|  |  |
|  |  |
|  |  |
|  |  |

## Work Products and Deliverables

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **To** | **Output** | **Planned week** | **Promised week** | **Late +/-** | **Delivered week** | **Rem** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

### Remarks

|  |  |
| --- | --- |
| **Remark Id** | **Description** |
|  |  |
|  |  |
|  |  |
|  |  |

# Project Experiences

## Positive Experiences

The main experience we learn from this MSO Project is to work in group. We also learn about neural networks like convolutional neural networks are more efficient

## Improvement Possibilities

We have experience that if we will organize our resource according to requirements then we can make project more successful.

We also learnt that analyst not to make assumptions.

# Financials

## Project Cost Summary

|  |  |
| --- | --- |
| Planned Cost | 20,000k |
| Actual Cost | 20000k |

## Work per Member

# Metrics

## Milestone Metrics

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

## Effort Metrics

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity** | **Actual Effort** | **Planned Effort** | **Deviation (%)** |
| Requirements Gathering | 75 | 80 | -6.25 |
| Analysis | 85 | 100 | -15 |
| Interface design | 97 | 110 | -11.81 |
| Web Page | 180 | 220 | -18.18 |
| Model design |  |  |  |
| 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))* |  |