SYSTEMS AND SOFTWARE REQUIREMENTS SPECIFICATION (SSRS)

FOR

RuleBear  
(a Google SketchUp Plugin)

Version 0.0

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RECORD OF CHANGES

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1. INTRODUCTION
   1. IDENTIFICATION

The plugin under development is named RuleBear. The customer providing specifications for this project is Dr. Jay McCormack at the University of Idaho. The ultimate customer or end-user of the system will be the University of Idaho’s Mechanical Engineering department students and/or faculty.

* 1. PURPOSE

The purpose of the plugin under development is to simplify the Google SketchUp model development experience for beginning users of SketchUp. This plugin will also provide a simplified way for an advanced user to create rules for a beginning user’s modeling environment.

* 1. SCOPE

This is the pilot version of a plugin intended to be succeeded by further developments. Upon completion of this phase of this project, the plugin and all development will be delivered to Dr. McCormack for distribution and/or further development at his discretion.

This specification is intended for version 1.0.

* 1. DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

|  |  |
| --- | --- |
| **Term or Acronym** | **Definition** |
| Alpha Test | Limited release(s) to selected, outside testers |
| Beta Test | Limited release(s) to cooperating customers wanting early access to developing systems |
| Final Test | Release of fully functional product to customer for approval, aka, Acceptance Test. |
| SSDD | System Specifications and Design Document |
| SSRS | System and Software Requirements Specification |
|  |  |

* 1. REFERENCES

There are no references to be cited for the [] plugin at this time.

* 1. OVERVIEW AND RESTRICTIONS

This document is for limited release only to the University of Idaho faculty and students directly affiliated with the development of this project.

Section 2 of this document describes the system under development from a holistic point of view. Functions, characteristics, constraints, assumptions, dependencies, and overall requirements are defined from the system-level perspective.

Section 3 of this document describes the specific requirements of the system being developed. Interfaces, features, and specific requirements are enumerated and described to a degree sufficient for a knowledgeable designer or coder to begin crafting an architectural solution to the proposed system.

Section 4 provides the requirements traceability information for the project. Each feature of the system is indexed by the SSRS requirement number and linked to its SDD and test references.

Sections 5 and up are appendices including original information and communications used to create this document.

1. OVERALL DESCRIPTION
   1. PRODUCT PERSPECTIVE

This product is independent of any other product, and as such, is self-contained.

* 1. PRODUCT FUNCTIONS

The product’s primary function is to allow users to create rules which affect the SketchUp development environment, and to allow these rules to be turned off and on. The program will have two separate components: rule-definition, and rule application.

* 1. USER CHARACTERISTICS

The users of RuleBear will consist of two defined types. This program is intended for an advanced user and a beginning user of SketchUp, both affiliated with the Mechanical Engineering department at University of Idaho.

* 1. CONSTRAINTS

Since the RuleBear plugin project is developed for University of Idaho use, further development of this project will halt if the University of Idaho faculty overseeing this project decide that this project should to no longer continue.

* 1. ASSUMPTIONS AND DEPENDENCIES
  2. SYSTEM LEVEL (NON-FUNCTIONAL) REQUIREMENTS
     1. Site Dependencies
     2. Safety, Security and Privacy Requirements
     3. Performance Requirements
     4. System and Software Quality
     5. Packaging and Delivery Requirements
     6. Personnel-related Requirements
     7. Training-related Requirements
     8. Logistics-related Requirements
     9. Precendence and Criticality of Requirements

1. SPECIFIC REQUIREMENTS
   1. EXTERNAL HARDWARE INTERFACE REQUIREMENTS
      1. Hardware Interfaces
      2. Software Interfaces
      3. User Interfaces
      4. Other Communication Interfaces
   2. SYSTEM FEATURES
      1. Use Case Diagrams
      2. System Feature Description
         1. Introduction/Purpose of this Feature
         2. Input/Output Sequence for this Feature
2. REQUIREMENTS TRACEABILITY