The Design and Build of a Simple Personal Finance System, Focused on Budgeting and Expenditure Analysis

Claudius de Moura Brasil
BSc Computing Project Report
Birkbeck College, University of London

May 2018

1 Abstract

Contents

2 Introduction

Accounting systems are important for all stakeholders (Boczko, 2012).

2.1 Methodology

For this report, an approach similar to that adopted by Bennett et al. (2010, p. 77) regarding methodology was used, where no specific named methodology was espoused, but concepts of object-oriented analysis and design were applied, in an coordinated and iterative fashion, using UML.

2.1.1 Universal Modelling Language (UML)

UML is a modelling language created with the intention of providing system architects, software engineer and developers with a common set of modelling tools with a defined syntax, which would help them better analyse, design and implement software-based systems, and to model business and similar processes (OMG, 2015, p. 43). It defines several constructs which have been employed throughout this report in order to model the specifications of the system.

Use case diagrams which were developed by Jacobson et al. (1992, cited Bennett et al., 2010, p. 154), have been used to model user requirements.

Some or all diagrams have been drawn with a rectangular frame around it, with a five-sided polygon containing its header, as per the specifications for UML 2.0 onwards Bennett et al., 2010, p. 125. This is done for ease of reference, in order for the reader to better identify which aspect of the problem domain is being modelled.

3   Requirements Gathering

References

Bennett, Simon, McRobb, Steve, and Farmer, Ray (2010). *Object-oriented systems analysis and design using UML*. Fourth Edition. McGraw Hill Higher Education.

Boczko, Tony (2012). *Introduction to Accounting Information Systems*. Pearson Custom Publishing.

OMG (2015). "Unified Modeling Language Specification". Version 2.5. In: URL: http://www.omg.org/spec/UML/2.5/PDF.