Student performance tracker

Analysis and Design Document

# Elaboration – Iteration 1.1

# Domain Model

The system records student participations in contests and activities. Each contest has a name, an organizer and belongs to a given category and can be about some subjects. A contest has one or more rounds, each round has location, a date when it took place. Students participate (individually or in teams) in one or more rounds of a contest, where they obtain results, students may be prepared for the round by a teacher. Participations earn students and teachers points, depending on: the category, the round and the placement (result).

# Architectural Design

## Conceptual Architecture

*[Define the system’s conceptual architecture; use an architectural style and pattern - highlight its use and motivate your choice.]*

## Package Design

*[Create a package diagram]*

## Component and Deployment Diagrams

*[Create the component and deployment diagrams.]*

# Elaboration – Iteration 1.2

# Design Model

## Dynamic Behavior

*[Create the interaction diagrams (1 sequence, 1 communication diagrams) for 2 relevant scenarios]*

## Class Design

*[Create the UML class diagram; apply GoF patterns and motivate your choice]*

# Data Model

*[Create the data model for the system.]*

# Test Strategy

*[Present the used testing methods and the associated test case scenarios.]*

# Elaboration – Iteration 2

# Architectural Design Refinement

*[Refine the architectural design: conceptual architecture, package design (consider package design principles), component and deployment diagrams. Motivate the changes that have been made.]*

# Design Model Refinement

## *[Refine the UML class diagram by applying class design principles and GRASP; motivate your choices. Deliver the updated class diagrams.]*

# Construction and Transition

# System Testing

*[Describe how you applied integration testing and present the associated test case scenarios.]*

# Future improvements

*[Present future improvements for the system]*