

SCAPES

System Design Document

Team Dorcs

Nem Zutkovic

Submitted to:

Dr. Christine Laurendeau

COMP 3004 – Object-Oriented Software Engineering

School of Computer Science

Carleton University

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1. Subsystem Decomposition

1.1 Subsystem decomposition related to *SavePgm*, *LoadPgm*, *RunPgm* and *CompilePgm*

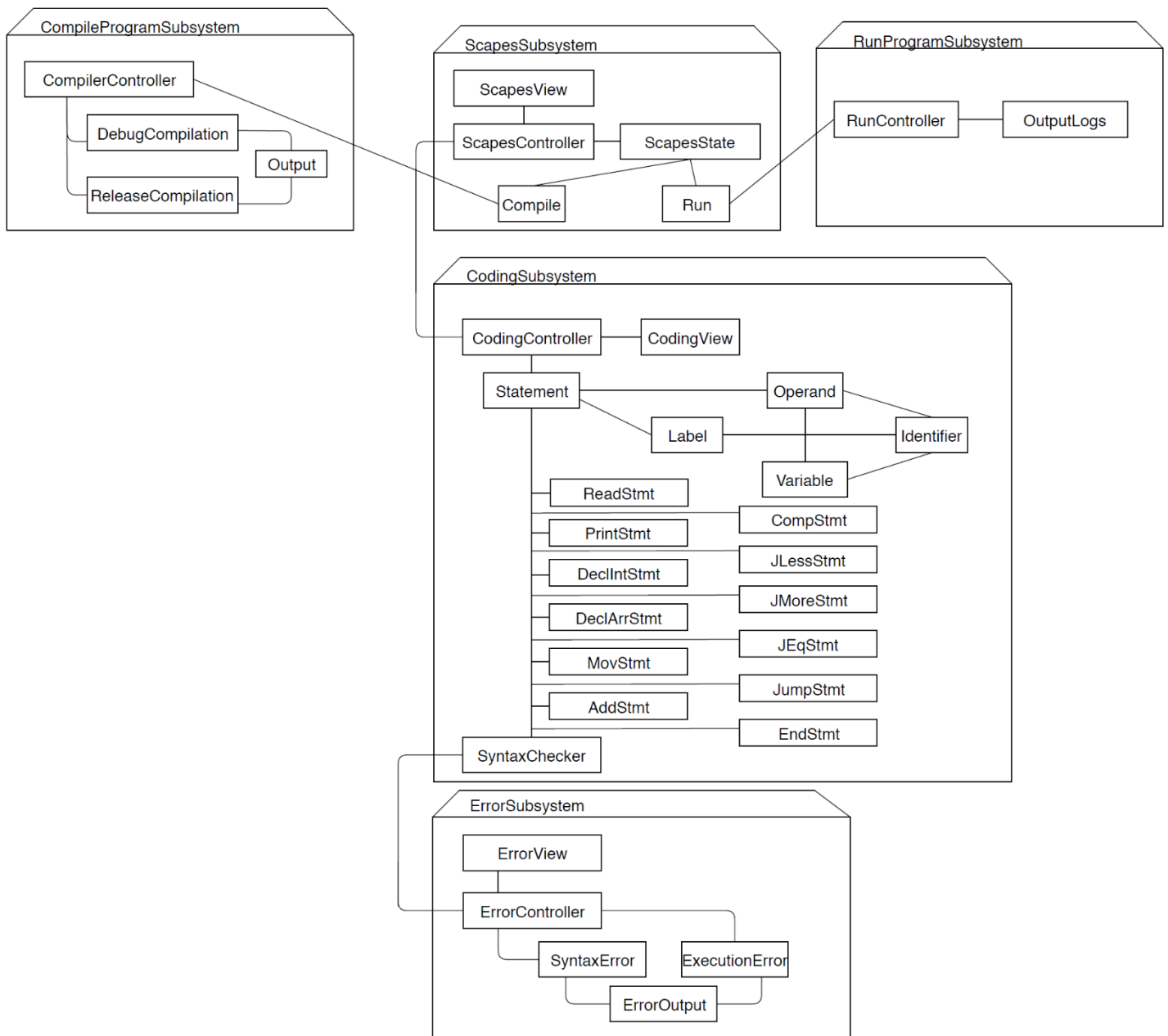


Figure 1 – Compiling, running, coding and error subsystems

This subsystem design exemplifies a moderate level of cohesion through the *CodingSubsystem*, *CompileProgramSubsystem* and *ErrorSubsystem*. There is also very low coupling as each subsystem is responsible for its own job and is relatively independent. This is noted by the very few dependencies between subsystems (there are 5 subsystems and 4 connections in total between each of them). There could be some further improvements to increase cohesion, which would need to be brainstormed, but overall there is a very low amount of coupling, which would allow modifications to be easily made to the system.

2. Design Patterns

2.1 Façade design pattern

2.2 Three-tier design pattern

