CS3203 Software Engineering Project

AY22/23 Semester 1

Project Report – System Overview

Team 11

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Consultation Hours: Tuesday, 1pm-2pm

Tutor: Sumanth

1. Plan for Milestone 3

Prepare a plan for Milestone 3, Major features that are planned for Milestone 3 and provide the same here in the form of a Gantt Chart. Include test efforts, Integration efforts etc.

- Completion of Affects relationship
- Completion of NOT
- Increase testing efforts especially for system testing

<Insert Gantt Chart>

2. Extension Proposal

2.1 Definition of the extension

We propose an extension to SPA by introducing a new SIMPLE construct called `match-case` statements.

2.1.1 Extension to SIMPLE BNF Grammar Rules

Concrete Syntax Grammar (CSG) - BNF Grammar Rules

stmt: read | print | call | while | if | assign | switch | case

```
Example SIMPLE Code:

01 match (x) {

02      case(1) {

03          y = 2;

04      } case(2) {

05          y = 3;

06      } case(_) {

07          y = x;

        }

    }
```

2.2. Changes to Existing System

2.2.1. SP

2.2.2. PKB

2.2.3. QPS

2.3. Implementation Details

2.3.1. SP

2.3.2. PKB

2.3.3. QPS

2.4. Possible Challenges to Implementation and Testing, and Mitigation Plans

2.4.1. SP

2.4.2. PKB

2.4.3. QPS

4 Extension Proposal

In Milestone 2, you are to propose and formally define an extension for SPA from any part of the specification (SIMPLE source code, design abstractions, PQL specification).

Your extension proposal should cover:

1. Definition of the extension

2. Changes required to your existing system and its components
    * Are there any new components that needs to be included in your system?
    * Does any components need to undergo changes?

3. Implementation details
    * what are the data structures and algorithms necessary to implement the extension?

4. Possible challenges to implementation and testing, and mitigation plans

5. Benefits to SPA

Estimated number of pages for Milestone 2
(It is only a guideline) (Remove this section from your report)

Title	Estimated number of pages
Plan for Milestone 3 Extension proposal	● Maximum 500 words and any diagrams as necessary (Roughly 4 pages) ● Big diagrams can be hyperlinked with permissions granted for us to refer to it ● Put vector graphics (e.g. svg instead of png)
TOTAL	Roughly 4 pages
NOTE: This page limit is excluding Front page, Table of contents and Appendix (if any)	