# FTERNITY: NUMBERS

SOEN 6481 Software Systems Requirements Specification

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#### Introduction

- PiCal is a calculator able to switch mode between regular arithmetic calculation and scientific calculation regarding PI
- Friendly GUI, controllable calculation precision
- Able to handle calculation containing four fundamental operations, PI number, circular circumference and circular area with intended radius, and retrieve 10 latest stored calculation results

#### Critical Decision

- The  $\arcsin(x)$  expression of Maclaurin series is applied to calculation PI
- Iteration times for calculation can be controlled
- Priority is indicated in both MoSCoW style and number style
- All acceptance tests regarding user stories are summarized in one matrix
- Thanks to team members for their valuable advice, particularly those from Adil and Maqsood

### Lessons learned from the Project

- Detailed project schedule is important
- Adopting a change management process at the early stage
- Learn from past project failures and put those lessons learned into action.
- Running reviews regularly and looking at the successes and improvements needed throughout the process
- Using uniform template

## Implementation

```
do you want to press area button to get area for your circular? (y/n)

press 'PI' button (case sensitive) to calculate PI number,

or press any button else to leave PI Calculation

do you want to press area button to get area for your circular?

1 area of this circular

3.141592653589792

**Out want to see at most 10 historical calculation results by now? (y/n)

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Figure 1. Left side, PI Precision Control Right side, 10 Latest Results Recall

Figure 2. Left side, Circular Circumference Calculation. Right side, Circular Area Calculation.

