

# Assignment 4 Specification

SFWR ENG 2AA4

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[insert short introduction about program and MIS here]

# Example Module

## Module

n/a

## Uses

n/a

## Syntax

### Exported Constants

n/a

### Exported Types

n/a

### Exported Access Programs

Routine name	In	Out	Exceptions
routine1	$\mathbb{Z}, \mathbb{Z}$	$\mathbb{Z}$	
routine2		$\mathbb{Z}$	
routine3		$\mathbb{Z}$	
routine3	$\mathbb{Z}, \mathbb{Z}$	$\mathbb{Z}$	

## Semantics

### State Variables

n/a

### State Invariant

n/a

### Assumptions

n/a

## Access Routine Semantics

routine(*parameters*):

- transition: *variable* := *something*
- output: *out* := *something*
- exception: *exc* := *something*

## Local Functions

n/a

## Considerations

n/a

# Dot Type Module

## Module

DotT

## Uses

n/a

## Syntax

### Exported Constants

None

### Exported Types

Dottypes = {R, G, B, Y} // *R for red, G for green, B for blue, Y for yellow*

### Exported Access Programs

Routine name	In	Out	Exceptions
new DotT	Dottypes	DotT	

## Semantics

### State Variables

dot: Dottypes

### State Invariant

None

### Access Routine Semantics

new DotT(t):

- transition:  $dot := t$
- output:  $out := self$
- exception:  $exc := none$

# Board ADT Module

## Template Module

BoardT

## Uses

n/a

## Syntax

### Exported Constants

n/a

### Exported Types

n/a

### Exported Access Programs

Routine name	In	Out	Exceptions
routine1	$\mathbb{Z}, \mathbb{Z}$	$\mathbb{Z}$	
routine2		$\mathbb{Z}$	
routine3		$\mathbb{Z}$	
routine3	$\mathbb{Z}, \mathbb{Z}$	$\mathbb{Z}$	

## Semantics

### State Variables

n/a

### State Invariant

n/a

### Assumptions

n/a

## Access Routine Semantics

`routine(parameters):`

- transition: *variable := something*
- output: *out := something*
- exception: *exc := something*

## Local Functions

n/a

## Considerations

n/a

# Dots Game Module

## Game Module

Dots

## Uses

n/a

## Syntax

### Exported Constants

n/a

### Exported Types

n/a

### Exported Access Programs

Routine name	In	Out	Exceptions
routine1	$\mathbb{Z}, \mathbb{Z}$	$\mathbb{Z}$	
routine2		$\mathbb{Z}$	
routine3		$\mathbb{Z}$	
routine3	$\mathbb{Z}, \mathbb{Z}$	$\mathbb{Z}$	

## Semantics

### State Variables

n/a

### State Invariant

n/a

### Assumptions

n/a

## Access Routine Semantics

routine(*parameters*):

- transition: *variable* := *something*
- output: *out* := *something*
- exception: *exc* := *something*

## Local Functions

n/a

## Considerations

n/a



## Questions

1.  $n/a$
2.  $n/a$