# Assignment 4 Specification

[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

routine(parameters):

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

## **Local Functions**

n/a

#### Considerations

## Dot Type Module

#### Module

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#### 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

routine(parameters):

• transition: variable := something

• output: out := something

• exception: exc := something

## **Local Functions**

n/a

#### Considerations

## 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

routine(parameters):

• transition: variable := something

• output: out := something

• exception: exc := something

## **Local Functions**

n/a

#### Considerations

## **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

routine(parameters):

• transition: variable := something

• output: out := something

• exception: exc := something

## **Local Functions**

n/a

#### Considerations

## Board ADT Module

## Template 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

routine(parameters):

• transition: variable := something

• output: out := something

• exception: exc := something

## **Local Functions**

n/a

#### Considerations

## **Dots Game Module**

#### Game 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

routine(parameters):

• transition: variable := something

• output: out := something

• exception: exc := something

## **Local Functions**

n/a

#### Considerations

## Questions

- 1. n/a
- 2. n/a