

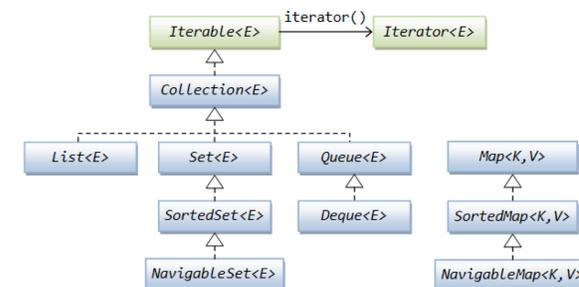
# More Sophisticated Behaviour

Technical Support System V3.0



Produced by: Dr. Siobhán Drohan  
Mr. Colm Dunphy  
Mr. Diarmuid O'Connor  
Dr. Frank Walsh

## Java Collections Framework:



Waterford Institute of Technology  
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

Department of Computing and Mathematics  
<http://www.wit.ie/>

# Topic List

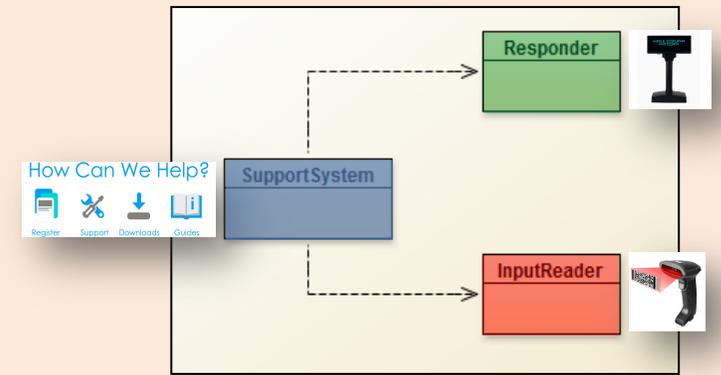
## 1. Recap: Technical Support System V2

## 2. Technical Support System V3

- Overview
  - 3 classes:
    - Responder
    - InputReader
    - SupportSystem

## 3. Class Development

- Responder class
  - Generating a related response
  - ArrayList
  - Map and **HashMap**
- InputReader class
  - Tokenizing Strings
  - Set and **HashSet**
- Responder class
  - Finishing the class
- SupportSystem class
  - A small change.



# Recap: Technical Support System V2



- 
- A console based, textual dialog system.
  - In this version, the system provides a **random** response from a list of pre-defined responses e.g.:
    - "That sounds interesting. Tell me more..."
    - "I need a bit more information on that."
    - "Have you checked that you do not have a dll conflict?"
    - "That is explained in the manual. Have you read the manual?"
    - " That's not a bug, it's a feature!"
    - "Could you elaborate on that?"
    - etc.

# Technical Support System V2

---

```
Welcome to the DodgySoft Technical Support System.
```

```
Please tell us about your problem. We will assist you  
with any problem you might have. Please type 'bye'  
to exit our system.
```

```
> my computer is broken
```

```
No other customer has ever complained about this before.
```

```
What is your system configuration?
```

```
> windows
```

```
That sounds odd. Could you describe that problem in more detail?
```

```
> it won't boot up
```

```
That sounds odd. Could you describe that problem in more detail?
```

```
> I get the blue screen of death
```

```
I need a bit more information on that.
```

```
> it's blue
```

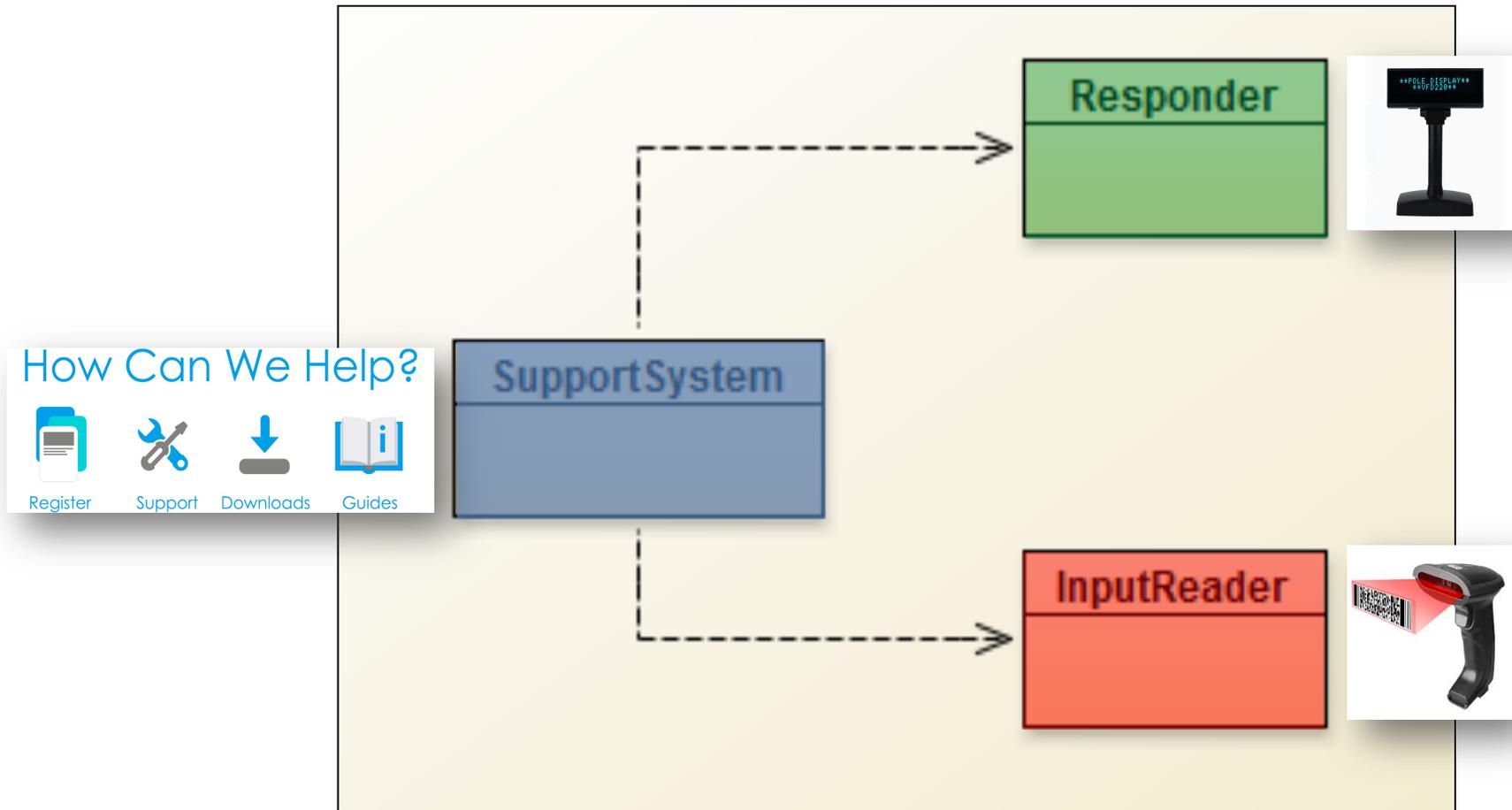
```
That sounds interesting. Tell me more...
```

```
> really blue
```

```
That's not a bug, it's a feature!
```

```
>
```

# Class Diagram V2



No change  
at CLASS  
level.

**Responder**  
updated  
internally  
to give  
random  
responses

# Topic List

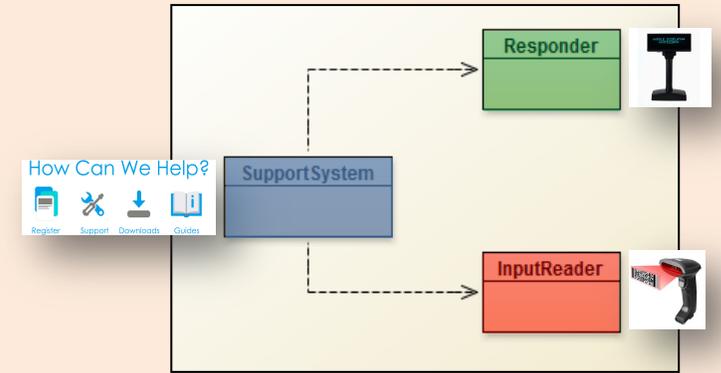
## 1. Recap: Technical Support System V2

## 2. Technical Support System V3

- Overview
  - 3 classes:
    - Responder
    - InputReader
    - SupportSystem

## 3. Class Development

- Responder class
  - Generating a related response
  - ArrayList
  - Map and **HashMap**
- InputReader class
  - Tokenizing Strings
  - Set and **HashSet**
- Responder class
  - Finishing the class
- SupportSystem class
  - A small change.



# Technical Support System V3



- 
- A console based, textual dialog system.
  - Based on the user input,
    - the system provides a **context-sensitive**, generated response from a list of pre-defined responses.
    - If the system cannot find a suitable generated response, it returns a **random** one.

# Technical Support System V3



Welcome to the DodgySoft Technical Support System.

Please tell us about your problem. We will assist you with any problem you might have. Please type 'bye' to exit our system.

> My computer **crashes** when I boot it up

Well, it never crashes on our system. It must have something to do with your system. Tell me more about your configuration.

> It is also very **slow**

I think this has to do with your hardware. Upgrading your processor should solve all performance problems. Have you got a problem with our software?

> It is running **windows 10**

This is a known bug to do with the Windows operating system. Please report it to Microsoft. There is nothing we can do about this.

> **HELP!**

That's not a bug, it's a feature!

> **HELP!**

Have you checked that you do not have a dll conflict?

> **HELP!**

Your description is a bit wishy-washy. Have you got an expert there with you who could describe this more precisely?

>

Random

Context  
Sensitive

**Any  
Questions?**

