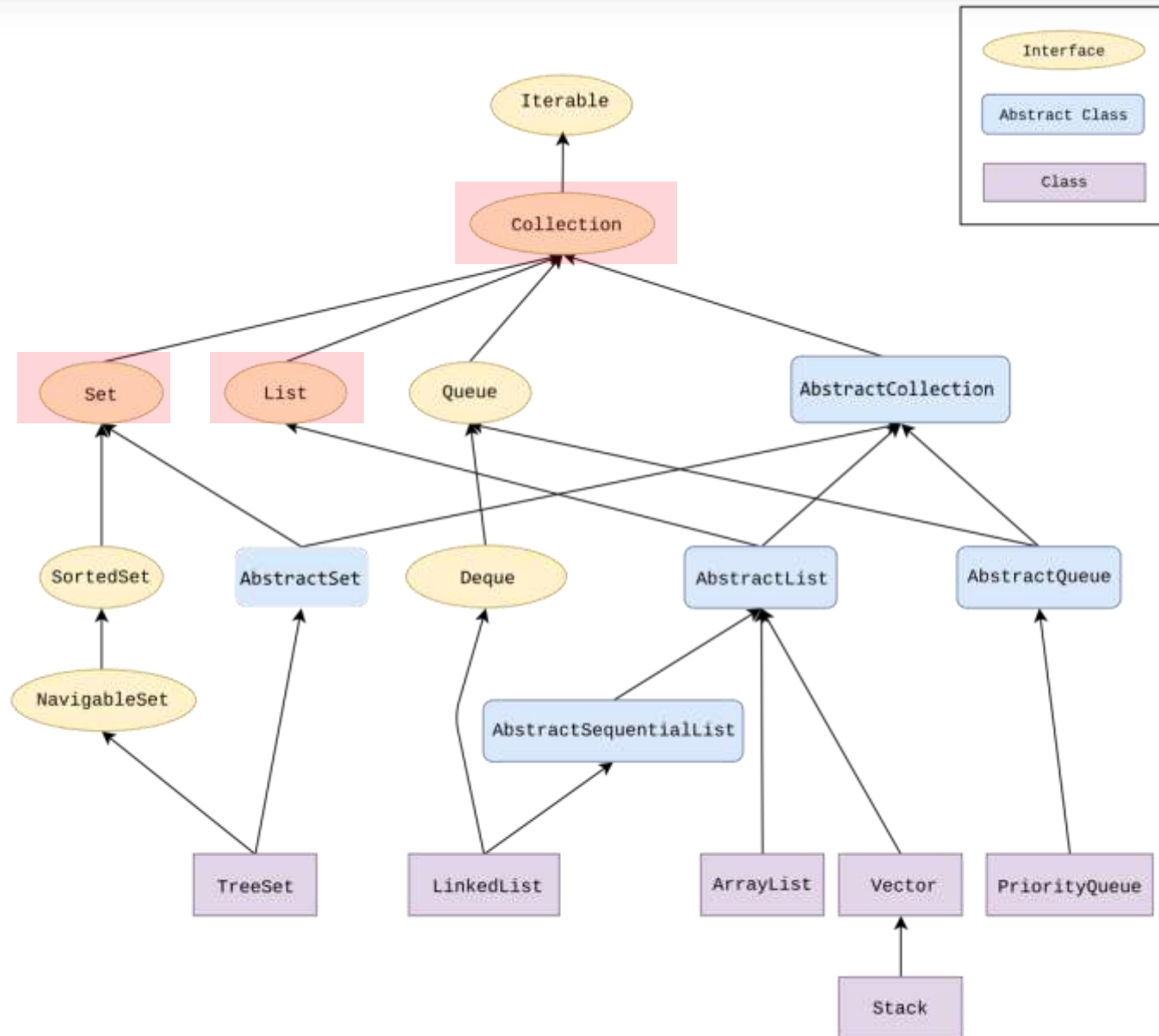


Selenium WebDriver Training

Set

Collection



- Interface (Sub Interface of Collection)
- Since Set is an interface, we cannot create objects from it

- Interface (Sub Interface of Collection)
- Since Set is an interface, we cannot create objects from it
- In order to use functionalities of the Set interface, we can use any of the implementation classes like HashSet, TreeSet, LinkedHashSet

Set Properties

- Set cannot have duplicate values inside the collection
- Set order depends on the implementation class
 - HashSet uses Hashing Algorithm (Random Order)
 - TreeSet uses ASCII order
 - LinkedHashSet uses insertion order

Syntax

```
Set<String> mentors = new HashSet<String>();
```

Syntax

```
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```



Interface

Syntax

```
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```



Generic (Type)

Syntax

```
Set<String> mentors = new HashSet<String>();
```



Set Name

Syntax

```
Set<String> mentors = new HashSet<String>();
```



Cannot create object for Set

Syntax

```
Set<String> mentors = new HashSet<String>();
```



The implementation class of Set

```
Set<String> mentors = new HashSet<String>();
```

What happens here?

All the methods of HashSet is not exposed in the mentors. **Only the methods of Set is exposed (only showing the required implementation)**

Set Methods

- `add()` - adds an element to a set

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- ~~`get()`~~ - get particular element based on index

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- `toArray()` - converts a set into an array

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- `size()` - returns the length of set
- `toArray()` - converts a set into an array
- `contains()` - returns true if set contains specified element

Activity: Create mentors Set with duplicates !

- Demonstrate the different index (order) and duplicates ..
- Also demonstrate to Hash, Tree and LinkedHash

Set Problem Solving

- Find the duplicate values from the array
- Find the unique values from the array

Summary

- Set – **interface** and implemented by **HashSet, TreeSet, LinkedHashSet**
- Set cannot have **duplicated** and **order depends on implementation**
- Selenium Example: **Get Window Handles**

Classroom Exercise (Breakout)

Print only unique characters in the given string

```
String companyName = "google" --> "gole"
```

Hints:

Use Set with add method.