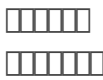




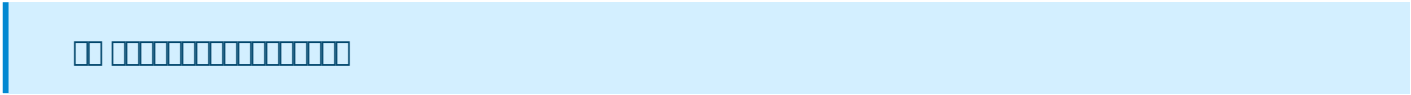
Web

- Java
  - Java - final
  - JDA Discord Forum Channel Thread
  - Java - Type Casting
- Spring (Spring Boot)
  - Spring

# Java



# Java 面试题 - final 关键字



final 在 Java 中有什么作用？ Code 题解

## final 修饰 class

final class 有什么作用？

编译错误？ Compile error？



Override？

编译错误？ Compile error？



编译错误？ Compile error？

final



- final 和 abstract 不能同时使用
- Reflection API 可以获取 final 的类



Java

# JDA ❷ Discord Forum Channel ❷ Thread ❷

## Code ❷

```
public class Main extends ListenerAdapter {

    public static final String TOKEN = "<BOT_TOKEN_HERE>";
    public static final String SERVER_ID = "<SERVER_ID_HERE>";
    public static final String PROJECT_FORUM_ID = "<FORUM_ID_HERE>";

    public static void main(String[] args) throws InterruptedException {
        JDA jda = JDABuilder.createDefault(Main.TOKEN).build();

        jda.addEventListener(new Main());
    }

    @Override
    public void onReady(ReadyEvent event) {
        System.out.println("Bot is ready");
        JDA jda = event.getJDA();

        Guild server = jda.getGuildById(SERVER_ID);
        assert server != null;
        ForumChannel channel = server.getForumChannelById(PROJECT_FORUM_ID);
        assert channel != null;
        System.out.printf("Channel name: %s%n", channel.getName());
        List<ThreadChannel> threadChannels = channel.getThreadChannels();

        for(ThreadChannel thread : threadChannels){
            System.out.printf("Thread: %s%n", thread.getName());
        }
    }
}
```

```

    }

    //  Bot
    //  jda.shutdown();

    }

}

```



- JDA Guild (Discord Server) Guild ForumChannel
- `getThreadChannels()` ThreadChannel List
- List for



- **TOKEN** **Channel ID** **(Hardcode)**
- JDA (JDA.shutdown()) Gradle

# Java ☐☐ - Type Casting

[illegible]Casting ☐ ☐ ☐ ☐

--	--	--	--	--	--	--	--

```
class Animal {  
    void speak(){  
        System.out.println("Default speak");  
    }  
}
```

```
class Bird extends Animal {
    @Override
    void speak() {
        System.out.println("☐☐ ");
    }
}
```

```
class Dog extends Animal {
    @Override
    void speak() {
        System.out.println("🐶   ");
    }
}
```

```
public class main {  
    public static void main(String[] args) {  
        Animal animal = new Animal();  
        Bird bird = new Bird();  
        Dog dog = new Dog();  
  
        animal.speak();  
        bird.speak();  
        dog.speak();  
    }  
}
```

## // Upcasting and Downcasting

Animal animal2;

```
animal2 = bird; // Upcasting
```

```
animal2.speak(); // works normally
```

```
Bird bird2;
```

```
// bird2 = animal; // Down casing, compile error
```

```
//      bird2 = (Bird)animal; // Compile pass
```

```
// bird2.speak(); // but throw ClassCastException error
```































```
Dog dog2;
```

```
//      dog2 = bird; // Obviously not working for compiling
```

```
// dog2 = (Dog)bird; // Cannot casting to another child class, compile error.
```

}

}

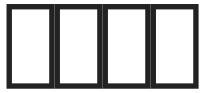
- Bird  casting  Animal  Upcasting  Upcasting 
-  animal casting  Bird  Animal  Bird   
 Compiler 
  -  Downcasting  Compiler 
-  (Bird)animal  Compiler  Compiler   
 Compiler  OK 
  -  ClassCastException  Runtime error   
 JVM 
-  Animal  class  Compiler   
 Compiler  ... 



# Spring (스프링) Spring Boot

Java 스프링

Spring (☐☐ Spring Boot)



# Spring

1.
2. Project  Gradle - Kotlin  Kotlin DSL ☐
3. Spring Boot
4. Project Metadata
5. Packaging  Jar ☐
6. Java
7. Dependencies  Add Dependencies...  Spring Web
8.  GENERATE