

**Turība University**

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**Friendly Coding**

**PROFESSIONAL BACHELOR THESIS**

**Computer Systems**

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## **What is Friendly Coding?**

- Code that is easy to read, understand, modify, and maintain.
- Prioritizes correctness and readability.
- Encourages consistent style and thoughtful error handling.
- Emphasizes clear naming, simple structure, small methods, and good documentation.
- Using proper indentation to make code easier to read and understand.

## **Why is Friendly Coding used?**

- Easier to understand for new developers and future self.
- Easier debugging and fewer bugs introduced during changes.
- Better collaboration and knowledge sharing.
- Long-term maintenance reduces time and cost.

## Core Principles in Java

- Use descriptive names for variables, methods, classes.
- Each method should do one thing – it improves readability and testability.
- Follow a project-wide style guide (braces, indentation, spacing).
- Use meaningful comments, not obvious ones.
- Meaningful Error Handling by providing context in error messages.
- Inline comments only to explain why something is done, not what is obvious.
- Make proper documentation and use comments for better understanding.

## Practical Examples

- Use “firstName or lastName” instead of “n”.
- Use proper styles and indentation to make code understandable.

```
class HelloWorld {  
    public static void main(String[] args) {  
        System.out.println("Hello, World!");  
    }  
}
```

- Use Javadoc for public APIs.

- Validate inputs at method entry – like checking if the input is integer in a sum function.

## **Conclusion**

Friendly coding in Java makes projects easier to learn, modify, and scale. By focusing on clear naming, small methods, consistent style, and thoughtful error handling, we can produce more reliable and maintainable code.