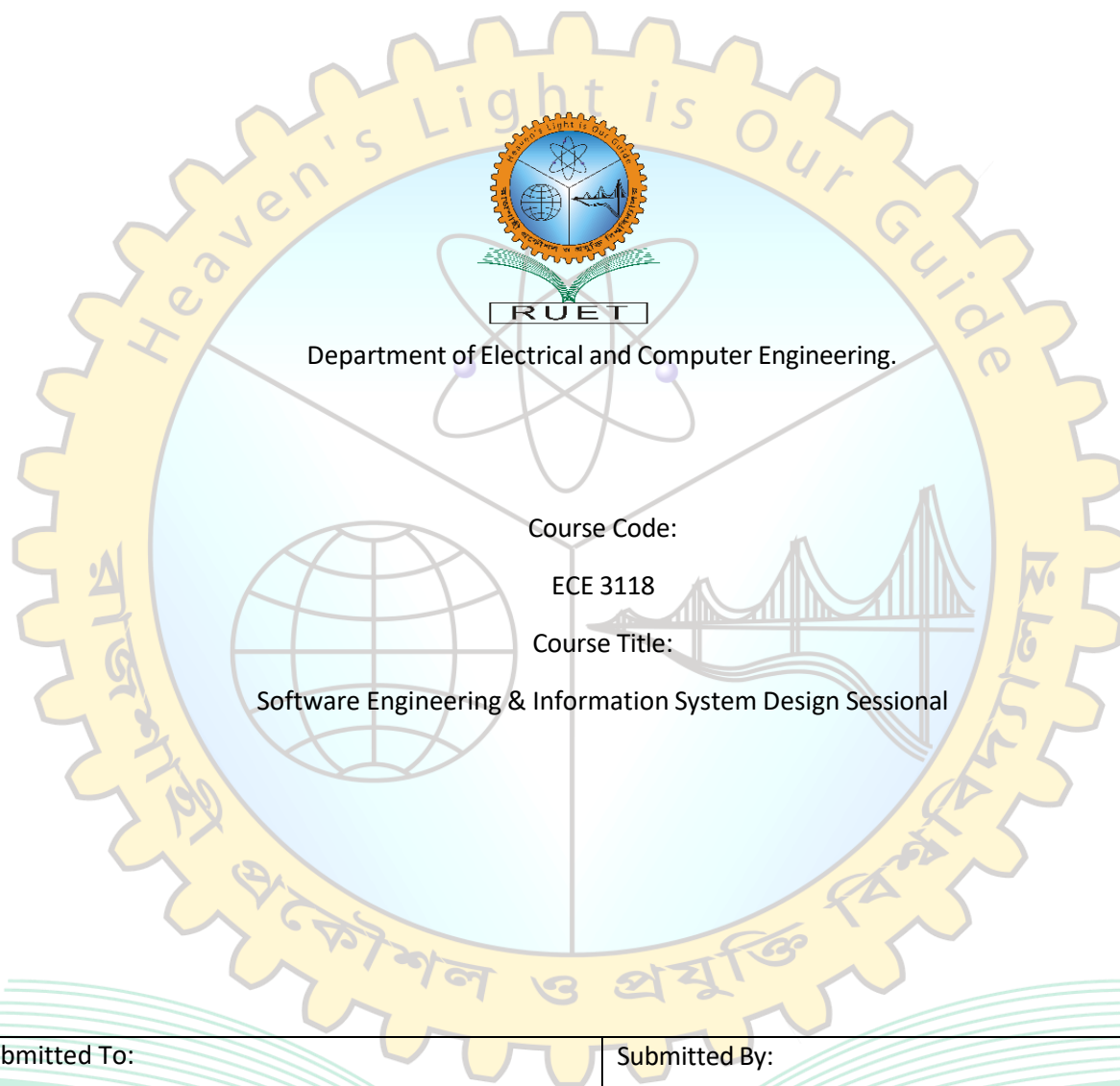


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Rajshahi University of Engineering and Technology, Rajshahi.



Course Code:

ECE 3118

Course Title:

Software Engineering & Information System Design Sessional

Submitted To:

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## Experiment 2:

**Experiment Name:** Best Coding Practice

### Naming Conventions in Programming

Effective naming conventions are crucial in programming as they improve code readability, consistency, and ease of maintenance. Below are some of the most common naming styles used across programming languages:

#### 1. Camel Case

Camel case is characterized by a lowercase first letter in the initial word, followed by each subsequent word capitalized. This style is frequently used for variables and functions, especially in languages like JavaScript, Java, and Swift.

- **Syntax:** firstWordLower, SubsequentWordsCapitalized
- **Examples:**
  - firstName
  - totalAmount
- **Usage:**
  - **Variables:** let userName = "John";
  - **Functions:** function calculateTotal() { ... }

#### 2. Snake Case

Snake case separates words with underscores and maintains lowercase throughout. It is widely used in languages such as Python and Ruby, particularly for variable and function names.

- **Syntax:** all\_words\_lowercase\_with\_underscores
- **Examples:**
  - first\_name
  - total\_amount
- **Usage:**
  - **Variables:** user\_name = "John"
  - **Functions:** def calculate\_total():

### 3. Pascal Case

Pascal case capitalizes the first letter of each word, making it similar to Camel Case but with an uppercase first letter. This naming convention is typically reserved for classes and constructors in languages like C# and Java.

- **Syntax:** EachWordStartsWithCapital
- **Examples:**
  - FirstName
  - TotalAmount
- **Usage:**
  - **Classes:** class UserAccount { ... }

### 4. Kebab Case

Kebab case uses hyphens to separate words, with all characters in lowercase. It is primarily utilized in URLs, HTML IDs, and CSS class names, though some configurations and file naming conventions also adopt this style.

- **Syntax:** all-words-lowercase-separated-by-hyphens
- **Examples:**
  - first-name
  - total-amount
- **Usage:**
  - **CSS Classes:** .user-name { ... }
  - **URLs:** <https://example.com/user-profile>

## Summary

<b>Naming Style</b>	<b>Syntax</b>	<b>Common Use Cases</b>	<b>Examples</b>
<b>Camel Case</b>	firstWordLower, NextWord	Variables, Functions	firstName, totalAmount
<b>Snake Case</b>	all_words_lowercase	Variables, Functions (Python, Ruby)	first_name, total_amount
<b>Pascal Case</b>	EveryWordCapitalized	Classes, Constructors (Java, C#)	FirstName, TotalAmount
<b>Kebab Case</b>	all-words-lowercase	CSS Classes, URLs, HTML IDs	first-name, total-amount

Each naming style has a specific purpose and helps maintain consistency within a codebase, making it more understandable for developers who encounter the code in the future. By following these conventions, developers can contribute to a cleaner, more standardized coding environment.