

### Assignment 3 : Object-Oriented Programming Languages

1. JavaScript	ยศนันท์ + ลลิตา
2. C#	อารยา + ภิราภรณ์
3. Ruby	ณัฐนิชา + ธนเรศ
4. Scala	ชัชวาลย์
5. PHP	กษิรา

**Due date:** after 2/62 Final Examination (next Wednesday)

**Contents:** Features, Structures, Syntax, **Object-Oriented Programming**, Code Examples and References

**Demonstration:** Object-Oriented Programming of that language.

**Software:** What are tools or Software for create?

**Must Do it:** Make Clip VDO (VDO must compose a Content frame and Narrator frame appear together). Duration about 10-15 minutes. Write to DVD and Send.

#### Assignment 4 : Design Patterns

1. Creational Patterns a. Abstract Factory, Builder, Factory Method, Object Pool, Prototype, Singleton	ยศนันท์ + ลลิตา
2. Structural Patterns a. Adapter, Bridge, Composite, Decorator, Facade, Flyweight, Private Class Data	อารยา + ภิราภรณ์
3. Behavioral Patterns a. Chain of Responsibility, Command, Interpreter, Iterator, Mediator, Memento, Null Object	ณัฐนิชา + ชนเรศ
4. Behavioral Patterns a. Observer, State, Strategy, Template Method, Visitor	ชัชวาลย์
5. Proxy a. Structural Patterns	กษิรา

**Due date:** after 2/62 Final Examination (next Wednesday)

**Email:** [nueng.com.guru@gmail.com](mailto:nueng.com.guru@gmail.com)

**Typing:** Word, Font TH Niramit 16pt (normal), 18pt (topic)

**Margin:** left 1.5 inches, top right bottom 1 inch.

**Contents:** Description or Intent, Problem, Discussion, Structures, Examples and References

**Must Do it:** Send Word File to e-Mail.