GROUP ASSIGNMENT 5
BEHAVIORAL MODELING
(4-5 students)

I. Goal:

The series of group assignments (GA2-GA6) aim to exercise your skill in **analyzing and designing a real information system**. You will be part of a team which consists of 4 to 5 people. Each group will be assigned a mini case. Each case concerns possible information systems project (as part of Electronics Commerce Information Systems) to be developed in Anapedia.com. In this part, the objective of Group Assignment 5 is:

a. Student can create behavioral modeling (as part of system proposal deliverable) of a case study of information systems projects.

II. Submission and Deadline:

a. Please write **complete identity information (class, name, NPM)**
b. Deadline
   Softcopy : Sunday, 6 December 2020, 23.55 on SCeLe
c. Format softcopy:
   [GA5]-[Class]-[Group Name]
   Example: GA5-A-Group 1
d. Late submission of coursework is **only accepted in the next day**, but penalty will be applied, result in **20% deduction of the total score.**
e. Indication of **plagiarism** will result in **zero mark.**
f. Write the references (if any)
g. Each member of group must **submit peer review form** (BORANG GROUP) via SCELE (**no later than one day after deadline**, see dropbox for deadline).
h. **Presentation will be held in 14th Week** (see further announcement about this).

III. Instructions

a. Please refer to section **Case Study Assignment** below to get the case study assignment for your group.
b. This assignment continues your analysis of the given case study to deliver the behavioral model.
c. Use your previous analysis of functional and structural model to continue your analysis of behavioral model.
d. Based on your analysis, **you are expected to create**: **BEHAVIORAL MODEL**
   i. Interaction Diagram
   - Create **sequence diagram** for **selected use cases (see Section V).** Use **normal flow scenario** to create the model

- Based on the sequence diagram above, create the **communication diagram** for **selected use cases (see Section V).**

ii. Behavioral state machine diagram

- Identify **one object** to be modelled by behavioral state machine diagram.

iii. CRUD Analysis

- Create **CRUD matrix (exclude Execute interaction)** to validate interaction among classes.

e. The guidelines and templates for system proposal deliverable are provided, but you are allowed to modify them. The guidelines and templates state the minimum description required for the project that ought to be provided by each project team.

f. Merge the deliverables of this assignment (GA 5) with your previous deliverables (Functional Modeling - GA 2, 3, and 4).

g. You are allowed to search supporting data or information on the internet. Please write your assumption for your proposed solution (if any) and provide the references (if any).

IV. Topics of E-Commerce IS for Anapedia.com

• Topic 1: *Product Management System*	**PIC: Clarisa**
• Topic 2: *Merchant & Partnership System*	**PIC: Falahdina**
• Topic 3: *Transactions System*	**PIC: Saffanah**
• Topic 4: *Marketing & Service System*	**PIC: Nur Rifandy**
• Topic 5: *Human Resources System*	**PIC: Adiva**
• Topic 6: *Warehouse & Expedition System*	**PIC: M. Andriansyah**

V. Use Cases for Interaction Diagram per Topic

Topic	Use Case
Topic 1: *Product Management System*	1. Mengelola *cluster* produk 2. Mengelola iklan 3. Mengelola *test case* 4. Mengelola persetujuan *product bundling* 5. Mengevaluasi *dashboard* performa produk
Topic 2: *Merchant & Partnership System*	1. Registrasi toko *merchant* 2. Mengelola produk 3. Mengelola toko *partner* 4. Menindaklanjuti komplain 5. Mengevaluasi laporan performa *merchant &* toko *partner*
Topic 3: *Transactions System*	1. Mengelola keranjang belanja 2. Membeli produk 3. Mengelola Anapedia *Wallet* 4. Mengajukan pembatalan transaksi (dari sisi penjual) 5. Mengevaluasi performa transaksi

Topic	Use Case
Topic 4: *Marketing & Service System*	1. Melakukan riset pasar 2. Mengelola *event-based promotion* 3. Mengelola komplain 4. Mengajukan retur barang (dari sisi *customer*) 5. Mengevaluasi performa promosi
Topic 5: *Human Resources System*	1. Mengelola KPI 2. Mengelola *master data* pegawai 3. Mengelola *training* 4. Melakukan *payroll* 5. Mengevaluasi performa karyawan
Topic 6: *Warehouse & Expedition System*	*1.* Mengelola *picking ticket* 2. Mengelola penugasan kurir AnapedEx 3. Memverifikasi *replenishment order* 4. Mengelola penanganan retur 5. Mengevaluasi laporan utilisasi pengiriman *in-house vs outsource*

VI. Case Study Assignment per Group

Anaperancis A	
Group 1	Topic 1
Group 2	Topic 2
Group 3	Topic 3
Group 4	Topic 4
Group 5	Topic 5
Group 6	Topic 6
Group 7	Topic 1
Group 8	Topic 2
Group 9	Topic 3
Group 10	Topic 4
Group 11	Topic 5
Group 12	Topic 6
Group 13	Topic 6

Anaperancis B	
Group 1	Topic 1
Group 2	Topic 2
Group 3	Topic 3
Group 4	Topic 4
Group 5	Topic 5
Group 6	Topic 6
Group 7	Topic 1
Group 8	Topic 2
Group 9	Topic 3
Group 10	Topic 4
Group 11	Topic 5
Group 12	Topic 6
Group 13	Topic 3

VII. Marking Component

Content	Percentage
Sequence Diagram (40%)	
a. Actor & object identification	30%
b. Message & return value identification	30%
c. Execution occurrence & lifeline identification	20%
d. Syntax correctness	20%
Communication Diagram (30%)	
a. Actor & object identification	40%
b. Association & message identification	40%
c. Syntax correctness	20%
Behavioral State Machine Diagram (15%)	
a. State identification	50%
b. Event and transition identification	50%
CRUD Matrix (15%)	
a. Correctness of interaction	100%