

Protocol November 9, Dat O

Sources:

- Agenda (11_uml)
- Signavio Academic

Housekeeping

Homework

The class began with the class looking over the BPMN problems for homework. Went through individual problems and finding errors along the way and correcting them. A good chunk of this class focused on our BPMN models and a great wrap up on our detailed yet brief “training” on BPMN and the characteristics of their model.

Lecture

When to use UML?

To move onto bigger and better things, we must sadly put our newfound knowledge of BPMN away to make room for something greater, UML. Everything we did up to this point seemed possible on BPMN, but what happens when you get to something you cannot model? What if the task at hand was to model a system? BPMN is not the language to model an application, but UML will.

Difference between UML vs the other diagrams?

Diagram	Propose
Flowcharts	Model Flow
EPC	Model transactions
BPMN	Model process with communication
UML	Model systems and processes

The development of UML

- Until the 1970's – the software creation would be looked as an artform
- Until the 1980's – the split of data and procedures

- Until the 1990's – Object orientation
- Since 2005 – Integrated Modeling

When to use UML?

We discuss how UML can be used as a sketch as well as a blueprint that would show detail systems specifications. From the blueprint, you can turn those portions of that model into actual code when then it would eventually use it as a programming language.

MANY diagrams

It was let known that UML uses way more diagrams than the BPMN diagram. These can be broken down into two subcategories: Structural and Behavioral diagrams. It was mentioned during the lecture of the total disaster of the Berlin airport due to the negligence of following these UML diagrams and allowing errors to follow through and permanently damaging the result of the final product. The trick to UML is the juggling all the diagrams simultaneously to achieve a good result.

Berlin Airport Case Study

The inability to manage each diagram in UML cause the devastation of what came to be of the Berlin airport. The lack of proper structure ultimately causes the building operation to fail, showing how a structure can fail without proper management

Reflection

I thought today's lecture was interesting, especially learning about the Berlin Airport and how carelessness builds up along the way. However, I do feel that this will be made of an example in the future and will help those avoid problems like these in the future, similarly to the Hyatt Regency walkway collapse which the airport reminded me of. I also took something out of what was said in lecture today. A quote by Richard Feynman: ““If we want to solve a problem that we have never solved before, we must leave the door to the unknown ajar.” Whenever you build up knowledge and learn about a new topic, you must try and trust in your intuition to help you along the way. Very good advice.

References:

Birkenkrahe, Marcus. “mod482/11_uml” [Github] 2021.

https://github.com/birkenkrahe/mod482/tree/main/11_uml

Weske, Mathias. *Signavio Academic*, <https://academic.signavio.com>