Software Design minute paper

★ You can choose language you use as you like. 記入は日本語でも英語でも良いです。

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Today's topics: State Machine

(Describe your summary in each blank below. You can adjust (increase or decrease) spaces as you like. 以下のそれぞれの項目の下に要点を記載。スペースは自由に増減して良い。)

[What you learned (学んだこと)]

- 1. Introduction to State Machines:
 - Definition and basic concepts.
 - Importance and applications in modeling system behavior.
- 2. Components of State Machines:
 - States: Different conditions or modes of the system.
 - Transitions: The change from one state to another.
 - · Events: Triggers that cause transitions.
 - Actions: Activities that occur due to state changes.
- 3. Types of State Machines:
 - Simple State Machines: Basic structure with states and transitions.
 - Hierarchical State Machines: More complex, with nested states.
- 4. Behavior Modeling:
 - Entry and Exit Actions: Activities when entering or exiting a state.
 - Do-Activities: Continuous activities within a state.
 - Internal Transitions: Transitions within the same state.
- 5. State Machine Diagrams:
 - Visual representation of states, transitions, events, and actions.
 - Examples and explanations of diagram components like rounded rectangles for states and arrows for transitions.
- 6. Practical Examples:
 - Phone Call Process: Modeling the states and transitions in making a phone call.
 - Device Power Management: States and transitions in managing device power, such as power on/ off, idle, and heating.
- 7. Advanced Concepts:
 - Triggers: Specific conditions or events that cause transitions.
 - Behavior Expressions**: Detailed descriptions of actions and activities within states.

[What you need to learn more (更に学びが必要だと思うこと)]

- Explore how to implement state machines in different programming languages, using libraries and frameworks designed for state machine modeling.
- Study examples and best practices to ensure robust and efficient state machine implementations.

[Misc. Comments and/or questions (その他 所感・質問等)]

None