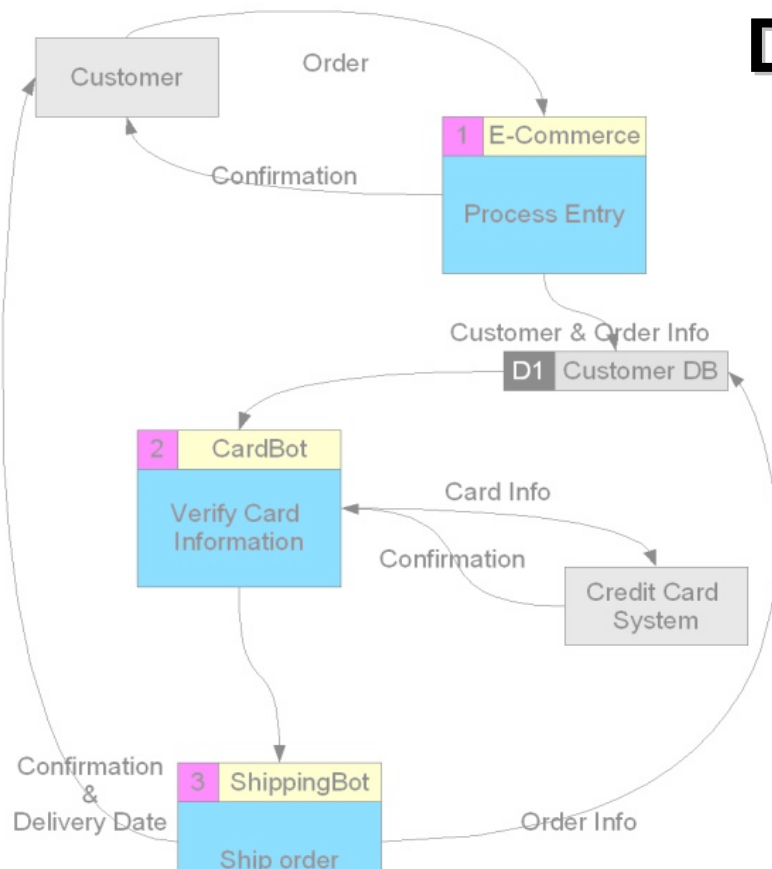


# Diploma Course in Software Engineering

## Data Flow Diagrams (DFD) Notations & Examples Part II



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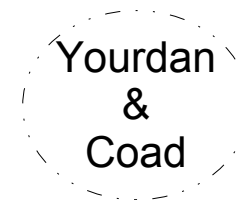
# Lecture Schedule

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- Note on Control Data
- DFD Examples

# Control Data and Control Process

- Control data or triggers and represented by **dotted arrows**.
- A process handling just triggers can be considered a **control process**.
- A control process is represented by changing the boundary of the shape to a **dotted boundary**.

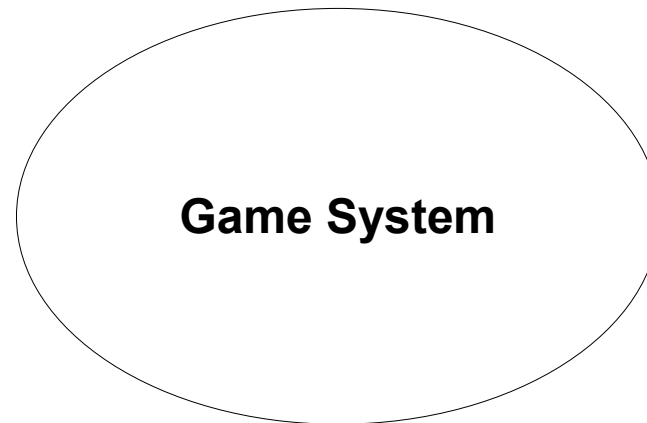


# Control Data Scenario 1

- Consider a computer game that offers two different gaming modes, either to **play the game** (game mode) or to **administer the game** (administrative mode). Certain **game details** are interchanged amongst the two game modes directly. All signals and triggers are managed by a **control process**.
- Represent this scenario using the **DeMarco** notation.

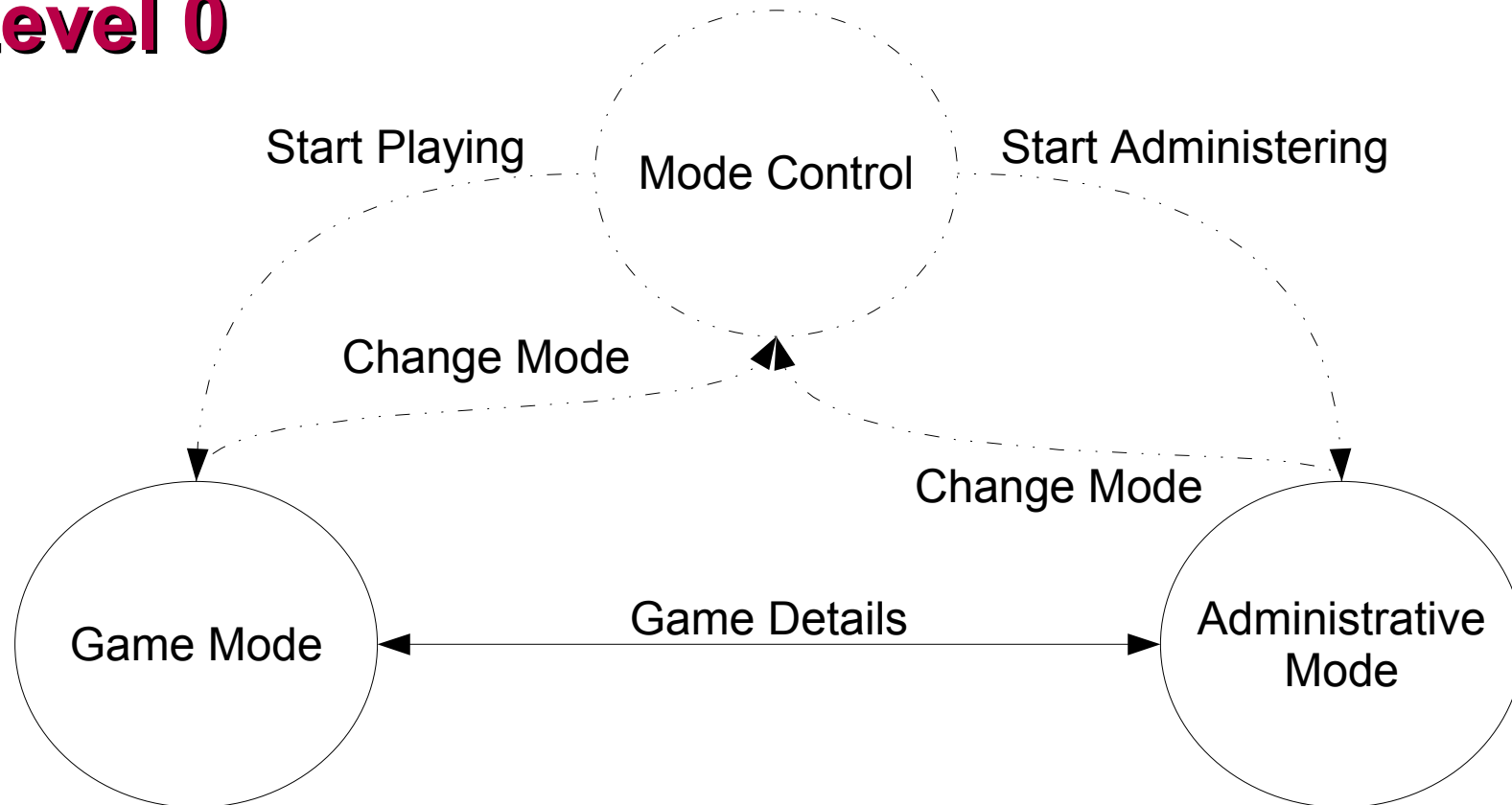
# Control Data Scenario 1

- **Context Diagram**



# Control Data Scenario 1

- **Level 0**

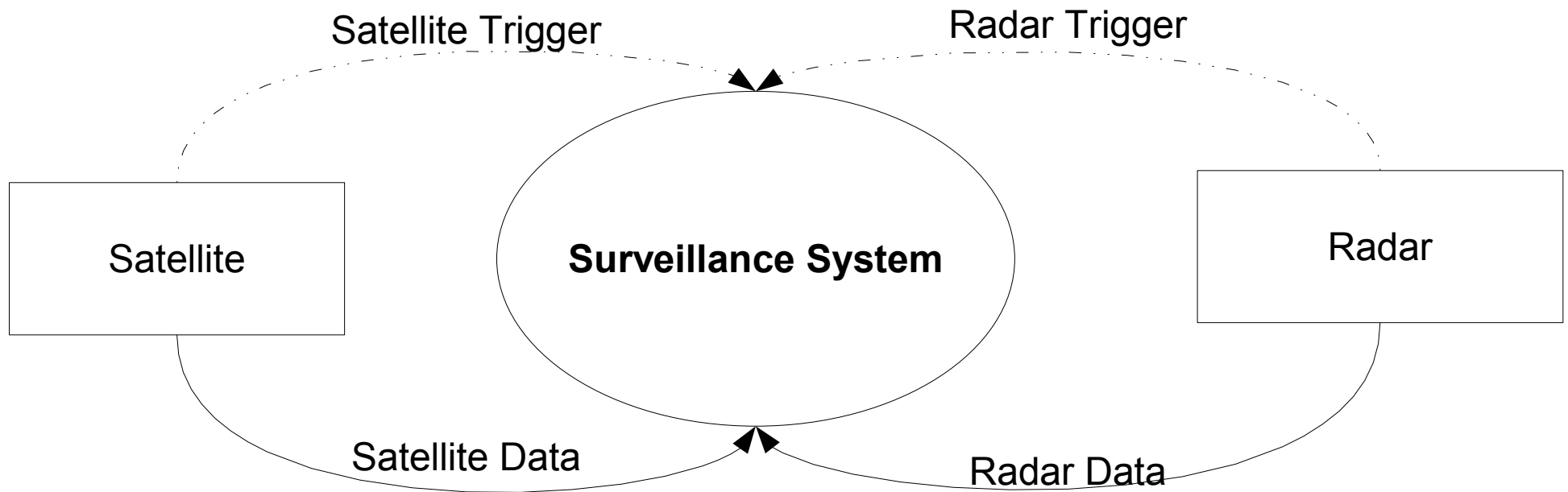


# Control Data Scenario 2

- A **surveillance system** is triggered by a **satellite or radar signal**. The satellite and radar send their **information** which is then stored in a **surveillance database**.
- Represent this system using the **DeMarco** Notation.
- Remember that no external entity can store data directly in a data store.

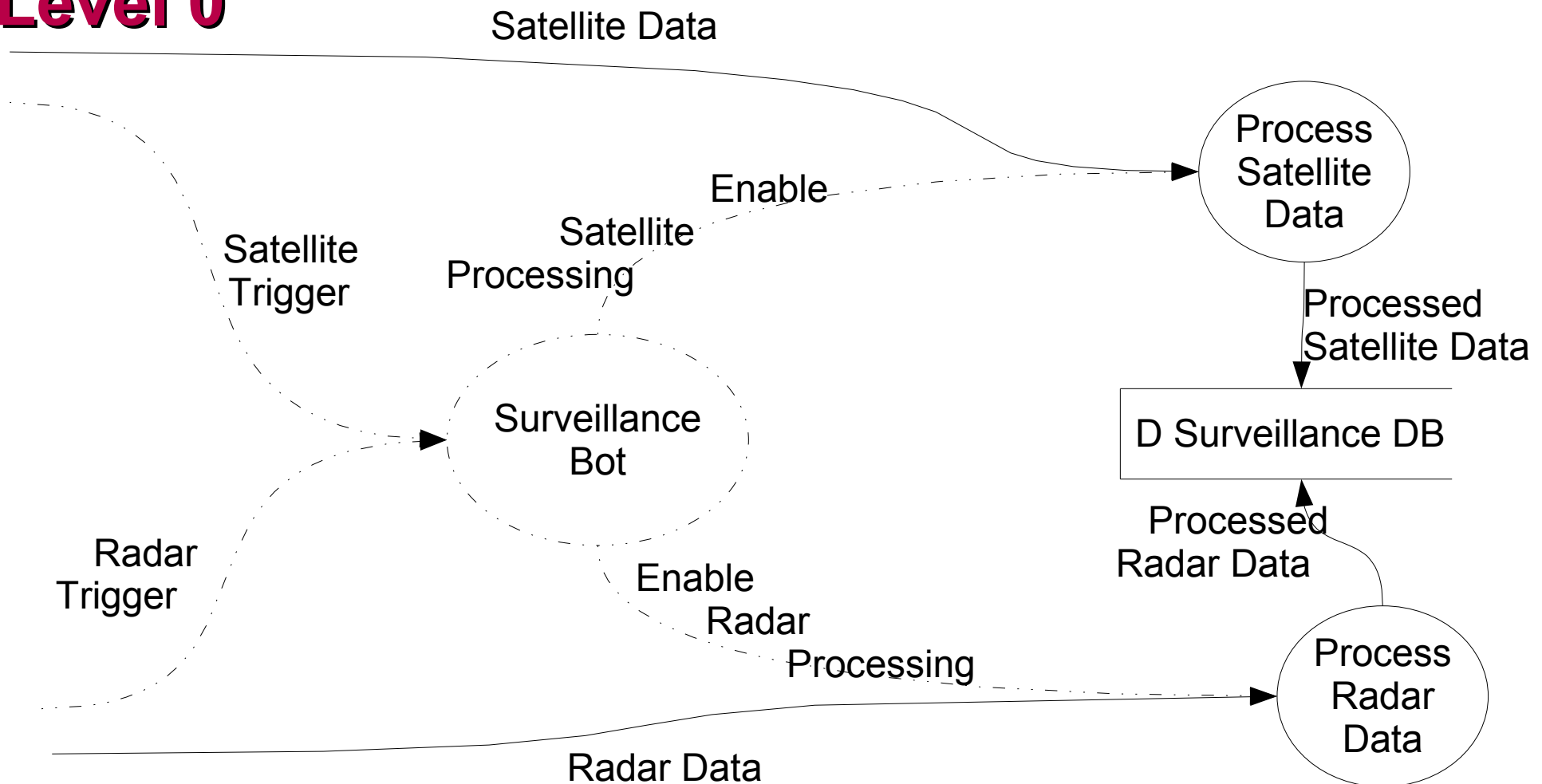
# Control Data Scenario 2

- **Context Diagram**



# Control Data Scenario 2

- **Level 0**



# References

- **Jens Bæk Jørgensen, University of Aarhus**
  - Design Methods for Reactive Systems, R.J. Wieringa
- **Yourdon, E.,**
  - Modern Structured Analysis, Prentice Hall, 1989
- **The University of Manchester**
  - <http://www.co.umist.ac.uk/~pjl/CT203/index.html>