

# 7 Lecture - CS501

## Important Subjective

1. What is the importance of defining the **application** domain in the design process for the ISA of FALCON-A?

Answer: Defining the application domain helps ensure that the ISA meets the needs of the specific area of application.

### **How does identifying the target audience impact the design process for the ISA of FALCON-A?**

Answer: Identifying the target audience helps ensure that the ISA meets the performance requirements of the intended users.

### **Why is it important to balance performance and simplicity in the design process for the ISA of FALCON-A?**

Answer: Balancing performance and simplicity ensures that the ISA is efficient and cost-effective while still providing sufficient performance for the intended users.

### **What is the role of selecting the instruction set features in the design process for the ISA of FALCON-A?**

Answer: Selecting the instruction set features helps determine which instructions should be included in the ISA to meet the performance and simplicity goals.

### **How does designing the instruction format impact the overall performance of the processor?**

Answer: The instruction format determines how the processor interprets and executes instructions, which can have a significant impact on the overall performance of the processor.

### **What is the goal of the design process for the ISA of FALCON-A?**

Answer: The primary goal of the design process for the ISA of FALCON-A is to create an efficient and easy-to-use ISA that meets the needs of the intended users.

### **How does the design process for the ISA of FALCON-A differ from other processor designs?**

Answer: The design process for the ISA of FALCON-A emphasizes balancing performance and simplicity to create an efficient and cost-effective processor.

### **What is the significance of ensuring that the ISA of FALCON-A meets the needs of the application domain?**

Answer: Ensuring that the ISA meets the needs of the application domain helps ensure that the processor is effective and efficient for the intended use.

### **How does the target audience impact the selection of instruction set features in the design process for the ISA of FALCON-A?**

Answer: The target audience helps determine which instruction set features are necessary to meet the performance requirements of the intended users.

**What are the benefits of including only the necessary instruction set features in the design process for the ISA of FALCON-A?**

Answer: Including only the necessary instruction set features can reduce the cost and complexity of the processor while still meeting the performance requirements of the intended users.