

# Project Flow - Documentation

## I. Customer

### A. Customer Needs

## II. System Designer

### A. Looks at the customers needs and designs a system

1. Defines the interfaces the system and the outside world
2. Defines the components (H/W, S/W)
3. Defines the interfaces between components

### B. From Customer Needs, develops High Level System Requirements (Specifications)

# Project Flow - Documentation

## III. Developers (H/W, S/W, Integrators, Testers)

A. From the High Level Specs, the H/W and S/W developers write detailed specs (architectures):

1. On how each component will operate (Design Specs)
2. On how each component will interface and integrate with the outside world (Integration Specs)
3. *On how each component is to be manufactured and (quality) tested (Manufacture Specs)*

B. From the High Level Specs and the Design and Integration specs, the integrators and testers write test specs to:

1. Insure each component meets their respective developer spec (Design Verification Test Spec)
2. Insure each component meets their interface and integrate (Integration Test Spec)
3. Insure that the components in aggregate operate as a system and meet the High Level System Requirements and customer need (System Test Spec)

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## IV. *Manufacturers*

### A. *From the Design and Manufacture Specs, production specs are written to*

1. *Insure that the components are produced according to requirements*
2. *Insure that the quality of the components are maintained throughout manufacture*

## V. Customer (User) Documentation

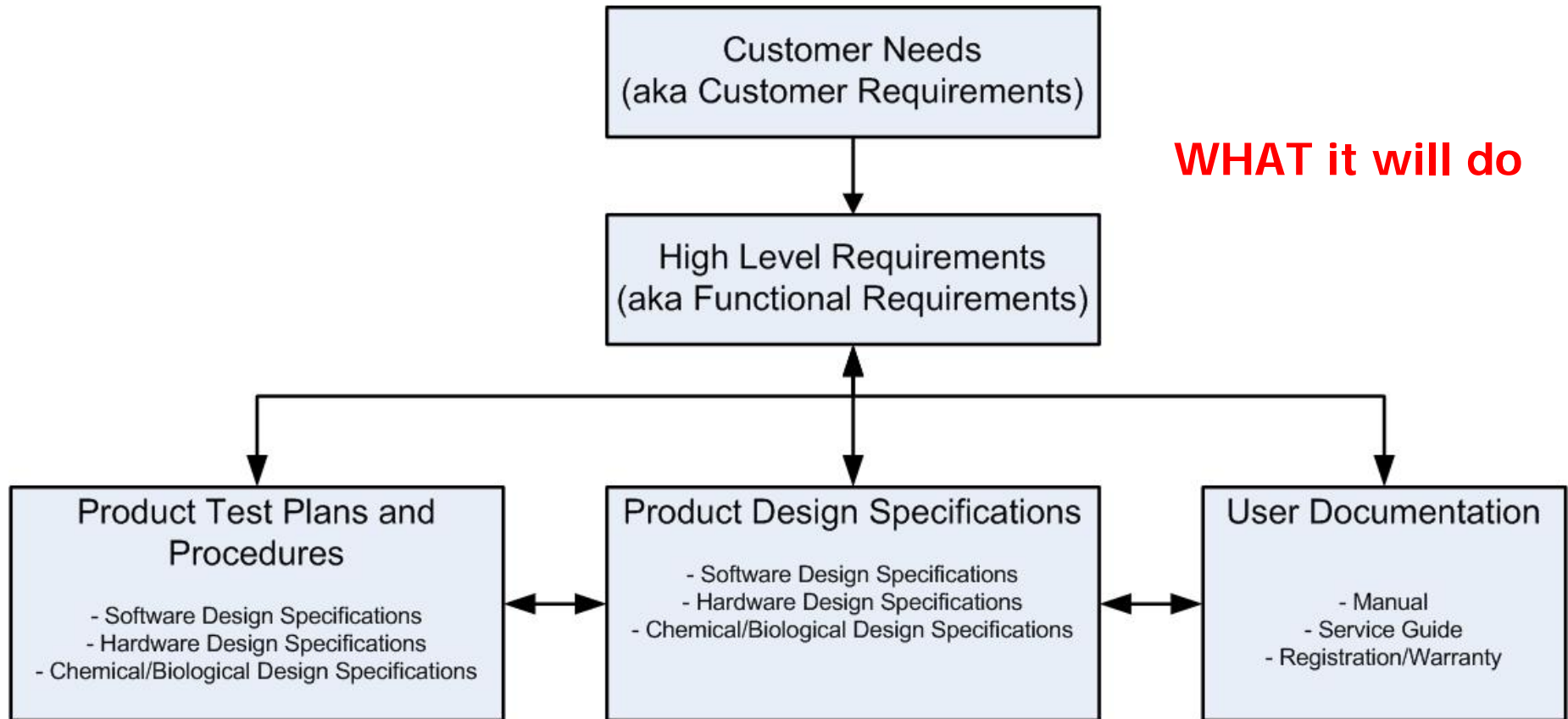
# Project Flow - Implementation

- I. **Developers (H/W, S/W)**
  - A. **Design prototypes from Specs**
- II. **Testers (Integrators, Testers)**
  - A. **Test prototypes**
- III. *Developers (H/W, S/W)*
  - A. *Work with manufacturer to develop a factory model*
- IV. *Manufacturers*
  - A. *Build factory model*
- V. *Testers (Integrators, Testers)*
  - A. *Test factory models separately*
- VI. **Integration and System Testers**
  - A. **Test components (*factory models*) in a system configuration**
- VII. **Customer Acceptance Testing**
  - A. **System Test is performed with customer to obtain customer approval**
- VIII. *Developers and Manufacturers (and Customers)*
  - A. *Ongoing Quality Inspections*
- IX. **Customer Documentation**

# Your Project – Questions to be answered

- Who is your customer?
- What are the customer needs?
- Who are your System Engineers?
- Who are your Developers and Testers?
- Is your project worthy for manufacture?
- What specs do you require?
- How do you expect to test your project?
- How are you going to assure the customer needs are meet?

# Engineering Documents



**WHAT it will do**

**HOW you  
will prove  
it works!**

**HOW it will do it**

**Educating  
the End User**

