

# Risk reduction through prototyping

Chapter 15

## Prototype can be used to:

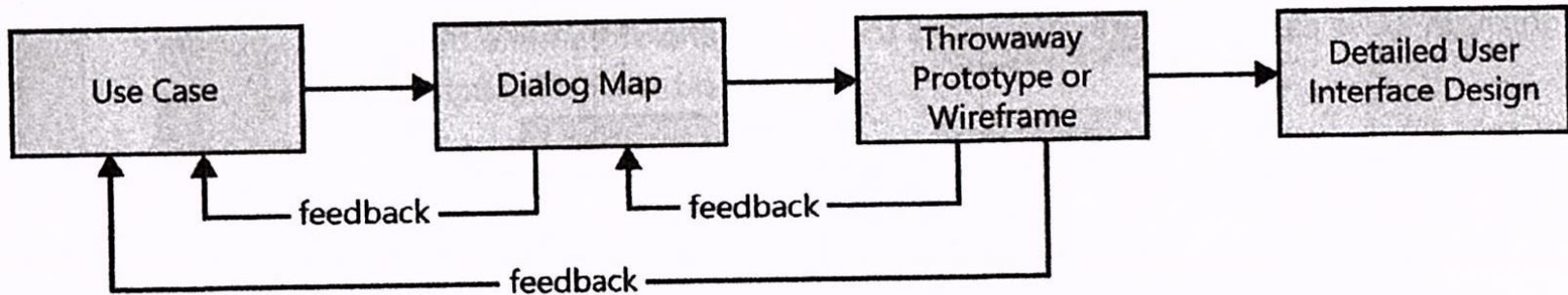
- Clarify, complete, and validate requirements
- Explore design alternatives
- Create a subset that will grow into the ultimate product

# Throw-away versus Evolutionary Prototypes

**TABLE 15-1** Typical applications of software prototypes

	<b>Throwaway</b>	<b>Evolutionary</b>
<b>Mock-up</b>	<ul style="list-style-type: none"> <li>■ Clarify and refine user and functional requirements.</li> <li>■ Identify missing functionality.</li> <li>■ Explore user interface approaches.</li> </ul>	<ul style="list-style-type: none"> <li>■ Implement core user requirements.</li> <li>■ Implement additional user requirements based on priority.</li> <li>■ Implement and refine websites.</li> <li>■ Adapt system to rapidly changing business needs.</li> </ul>
<b>Proof of concept</b>	<ul style="list-style-type: none"> <li>■ Demonstrate technical feasibility.</li> <li>■ Evaluate performance.</li> <li>■ Acquire knowledge to improve estimates for construction.</li> </ul>	<ul style="list-style-type: none"> <li>■ Implement and grow core multi-tier functionality and communication layers.</li> <li>■ Implement and optimize core algorithms.</li> <li>■ Test and tune performance.</li> </ul>

# Throw-away Prototypes



**FIGURE 15-2** Activity sequence from use cases to user interface design using a throwaway prototype.