



*Ministry of cooperatives  
Labour and Social Welfare*



*Iran Technical and Vocational  
Training Organization*

Deputy of training  
Plan and curriculums office

# Competency Training standard

## Title

**Essentials of Developing Windows® Store Apps Using HTML5  
and JavaScript**

**Occupational group**  
**Information Technology (IT)**

**International code**

2523-53-115-1

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- Iran Information Technology Development University
- Charmahal and Bakhtiari Technical and Vocational Training Organization
- Qazvin Unit Azad University
- Sharekord Center Technical and Vocational Training Organization

**Revision Process:**

- Scientific content
- According to market
- Equipment
- Tools

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## **Definitions:**

### **Job standard:**

The characteristics ' required competencies and abilities for Efficient Performance in work environment is called "the Job standard", and sometimes “The Occupational standard”

### **Training standard:**

The Training Map for achieving the Job’s subset Competencies.

### **Job title:**

Is a set of Tasks and Abilities which is expected from an employed person in the defined level

### **Job description:**

A statement covering the most important elements of a job, namely the position or title of the job, the duties, job’s relation with other jobs in a occupational field, the responsibilities, workplace conditions and required performance standards.

### **Course duration:**

The minimum of time which is required to achieve the training objects.

### **Admission requirements:**

The minimum of competencies and abilities which are obligatory for a potential admission.

### **Evaluation:**

The process of collecting evidence and judgment about whether a competency is achieved or not.

Include: written examination, practical examination

#### **Required Qualifications for Trainers:**

The minimum of Trainer’s technical and vocational abilities which the trainer is required to have.

### **Competency:**

The ability of efficient performing a duty in a variety of workplaces conditions

Knowledge:

The minimum set of facts and mental capacities which is necessary for achieving a competency. This can include science, (Mathematics, physics, chemistry or biology), technology or technical.

### **Skill:**

The minimum coordination between mind and body for achieving an ability or competency. It normally applied to practical skills.

### **Attitude:**

A set of emotional behaviors required for achieving a competency and can have non-technical skills and occupational ethics.

### **Safety:**

The cases which doing or not doing something can cause harm or accident

### **Environmental Consideration:**

A set of consideration about the act which should be done to minimize the environmental damage or pollution.

**competency title:**

Essentials of Developing Windows® Store Apps Using HTML5 and JavaScript

**competency description:**

In this course, students will learn essential programming skills and techniques that are required to develop Windows Store apps. This includes a combination of both design and development skills, as well as ensuring that students are comfortable using and making the most of the Microsoft Visual Studio and Expression Blend tools.

After completing this course, students will be able to:

- Describe the Windows 8 platform and features, and explore the basics of a Windows app interface.
- Create the User Interface layout and structure.
- Apply the MVVM pattern to application design.
- Implement the AppBar and layout controls.
- Use templates to create the UI.
- Use data binding to present data in the UI.
- Handle files and streams.
- Design and implement Process Lifetime Management (PLM).
- Handle navigation scenarios in a Windows Store app.
- Implement Semantic Zoom.
- Design and implement contracts such as Search, Share and Settings.
- Implement tiles and toast notifications in a Windows Store app.
- Respond to mouse, keyboard and touch events, including gestures.
- Deploy a Windows Store app to the Windows Store or an enterprise store.

**admission requirements:**

Minimum Degree Of Education: Post first year of high school

Minimum physical and mental ability:

Prerequisite Skills: This course is intended for professional developers who have one or more years of experience creating applications and who are comfortable programming in HTML5, JavaScript, and CSS3

**Course duration:**

Course Duration: 50 Hours

-Theoretical:10 Hours

-Practical:30 Hours

-Apprenticeship:0 Hours

-Project:10 Hours

**Evaluation : (%)**

# Exam 70-481



**Published:** October 11, 2012

**Languages:** English, Chinese (Simplified), French, German, Japanese, Portuguese (Brazil)

**Audiences:** [Developers](#)

**Technology:** Visual Studio 2012

**Credit toward certification:** MCP, MCSD

## **Required Qualifications for Trainers**

Essentials of Developing Windows® Store Apps Using HTML5 and JavaScript degree holders with 5 years experiences

**competency training standard****tasks**

	<b>Title</b>
1	Overview of the Windows 8.1 Platform and Windows Store Apps
2	Single-Page Apps and the MVVM Design Pattern
3	Using WinJS
4	Implementing Layout Using Windows 8.1 Controls
5	Presenting Data
6	Implementing Tiles and User Notifications
7	Handling Files in Windows Store Apps
8	Windows Store App Process Lifetime Management
9	Designing and Implementing Navigation in a Windows StoreApp
10	Implementing Windows 8.1 Contracts
11	Designing and Implementing a Data Access Strategy
12	Responding to Mouse and Touch
13	Planning for Windows Store App Deployment

Training standard

Contents analysis form

<b>Title:</b> Overview of the Windows 8.1 Platform and Windows Store Apps	time			
	Theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
<b>Knowledge and Skill:</b> - Introduction to the Windows 8.1 Platform - Windows 8 UI Principles - WinRT and Language Projections - Exploring the Windows 8 Platform - Exploring a Windows Store App	Determined by the instructor			<b>From Microsoft</b>
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard  
Contents analysis form

<b>Title:</b> Single-Page Apps and the MVVM Design Pattern	Time			
	theoretical	practical	Total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
<b>Knowledge and Skill:</b> - Single-Page Applications - The MVVM Design Pattern - Paper-based Quiz	Determined by the instructor			<b>From Microsoft</b>
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard

Contents analysis form

<b>Title:</b> Using WinJS	Time			
	theoretical	practical	Total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
<b>Knowledge and Skill:</b> - The WinJS Library - WinJS APIs - Defining the Data.Model Namespace and Objects - Using Promises to Load Data Asynchronously	Determined by the instructor			From <b>Microsoft</b>
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard

Contents analysis form

<b>Title:</b> Implementing Layout Using Windows 8.1 Controls	Time			
	theoretical	practical	Total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
<b>Knowledge and Skill:</b> - Windows 8.1 Layout Controls - Implementing WinJS Controls and Templates - The AppBar Control - Windowing Modes - Implementing an AppBar Control - Creating Adaptive Views	Determined by the instructor			From <b>Microsoft</b>
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard  
Contents analysis form

<b>Title:</b>	Time			
	theoretical	practical	Total	
	Presenting Data	Determined by the instructor		
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
<b>Knowledge and Skill:</b>	Determined by the instructor			<b>From Microsoft</b>
- Working with Data Presentation Controls				
- The ListView Control				
- Implement the ListView Control				
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard  
Contents analysis form

<b>Title:</b> Implementing Tiles and User Notifications	Time			
	theoretical	practical	Total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
<b>Knowledge and Skill:</b> - Implementing Tiles, Live Tiles, Secondary Tiles, and Badge Notifications - Implementing Toast Notifications - Enabling Live Tile Functionality on the Main Tile	Determined by the instructor			From <b>Microsoft</b>
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard

Contents analysis form

<b>Title:</b> Handling Files in Windows Store Apps	Time			
	theoretical	practical	Total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
<b>Knowledge and Skill:</b> - Handling Files and Streams in Windows Store Apps - Working with File User Interface Components - Writing Data to the Notes File - Reading Data from the Notes File	Determined by the instructor			From <b>Microsoft</b>
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard

Contents analysis form

<b>Title:</b> Windows Store App Process Lifetime Management	Time			
	theoretical	practical	Total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
<b>Knowledge and Skill:</b> - Process Lifetime Management - Windows Store App Activation and Background Tasks - Implementing a State Management Strategy - Explore the Different PLM States - Implement State Management	Determined by the instructor			From <b>Microsoft</b>
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard

Contents analysis form

<b>Title:</b> Designing and Implementing Navigation in a Windows StoreApp	Time			
	theoretical	practical	Total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
<b>Knowledge and Skill:</b> - Handling Navigation in Windows Store Apps - Semantic Zoom - Add Navigation to the App - Implement Semantic Zoom	Determined by the instructor			<b>From Microsoft</b>
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard

Contents analysis form

<b>Title:</b>	Time			
	theoretical	practical	Total	
	Implementing Windows 8.1 Contracts	Determined by the instructor		
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
<b>Knowledge and Skill:</b> - Designing for Charms and Contracts - The Search Contract - The Share Contract - Managing App Settings and Preferences - Implement the Search Contract - Implement the Share Contract - Adding a New Setting to the Settings Pane - Optional: Implementing Search with the SearchBox Control	Determined by the instructor			<b>From Microsoft</b>
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard

Contents analysis form

<b>Title:</b> Designing and Implementing a Data Access Strategy	Time			
	theoretical	practical	Total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
<b>Knowledge and Skill:</b> - Evaluating Data Access Strategies - Working with Remote Data - Paper Based Quiz	Determined by the instructor			<b>From Microsoft</b>
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard  
Contents analysis form

<b>Title:</b> Responding to Mouse and Touch	Time			
	theoretical	practical	Total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
<b>Knowledge and Skill:</b> - Working with Mouse Events - Working with Gesture Events - Implement Mouse Events - Implement Gesture Events	Determined by the instructor			<b>From Microsoft</b>
<b>Attitude:</b> Speed and accuracy in doing the right thing				
<b>Health &amp; Safety:</b> Compliance with safety protection in the workplace				
<b>Environmental Consideration:</b> Compliance with environmental protection				

Training standard

Contents analysis form

<b>Title:</b> Planning for Windows Store App Deployment	Time			
	theoretical	practical	Total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - The Windows Store App Manifest - Windows Store App Certification	Determined by the instructor			<b>From Microsoft</b>
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Equipment & Tools & Materials & Resources (books, site, software...) form

\*Required quantity for each 15 Trainees

**From: Microsoft**