Introduction to Tizen SDK

1. Getting started with the SDK

2. Demonstrations:

- A tour of the IDE

- How to use the Emulator

- The Simulator and other tools

- Documentation

3. Summary

Tizen SDK Overview

- Tizen SDK is a comprehensive set of tools for Tizen app development

IDE
- Competitive editor for HTML, CSS, Javascript
- Project management, templates, samples, documentation
- Multiple target (Emulator/Device) management

Target like Emulator
- Various Device Emulation based on open source QEMU
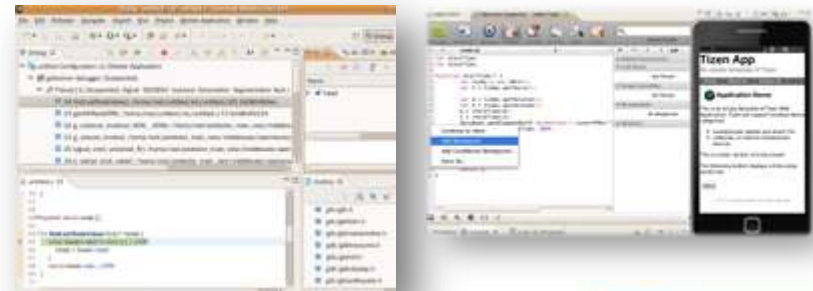- Event Injector such as Call/SMS send and receive

GUI Builder
- Productive and visual WYSIWYG/ Web GUI builder (*TBD*)

Others
- Debugging & profiling based on remote web inspector
- One step install, Multi-OS support
- Platform development (native) support

Tizen All-in-One Suites

TIZEN

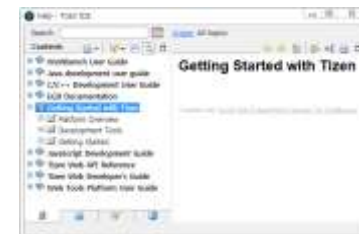WYSIWYG GUI design/editing

Test/debugging

Project management & easy code editing

IDE

Build system & Toolchain

- OBS
- Rootstrap management
- Cross compiler, packaging
- Project compatibility
- SDB

Static & Dynamic Analysis

Live SDK update

Help Contents

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Project Management

Project Management & Easy Code Editing	Emulator & Event Injector	Simulator	Debugging & Profiling	Multiplicity

- **Project Wizard**

  – Templates

  – Tizen sample applications

  – User-defined templates

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Easy code editing

| Project Management & Easy Code Editing | Emulator & Event Injector | Simulator | Debugging & Profiling | Multiplicity |
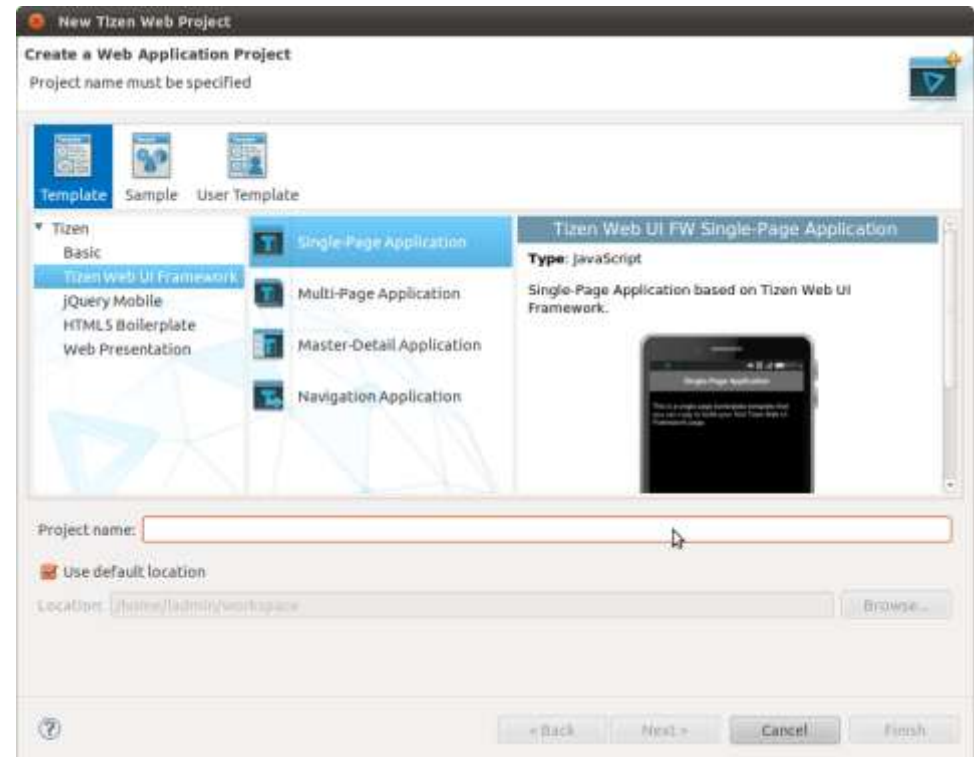
```
function startTime() {
    var today = new Date();
    var h = today.getHours();

    var m = today.
    var s = today.
    m = checkTime(
    s = checkTime(
    document.getEl
    t = setTimeout

}

function checkTime
    if (i < 10) {
        i="0" + i;
    }
    return i;
}
```

Number Date.getHours()

function getHours()

Since:
    Standard ECMA-262 3rd. Edition
    Level 2 Document Object Model Core
    Definition.
@memberOf
    Date
@returns
    {Number}

```
    tizen.
}
```

△ alarm	AlarmManager - Tizen
△ application	Application - Tizen
△ bluetooth	BluetoothManager - Tizen
△ calendar	CalendarManager - Tizen
△ call	CallManager - Tizen
△ constructor	Function - Object
△ contact	ContactManager - Tizen
△ filesystem	FileSystemManager - Tizen
△ lbs	LBS - Tizen
△ mediacontent	MediaSourceManager - Tizen
△ messaging	Messaging - Tizen

Press 'Ctrl+Space' to show Template Proposals

- **Hover**
  - Access API documentation from within the code

- **Auto-completion**
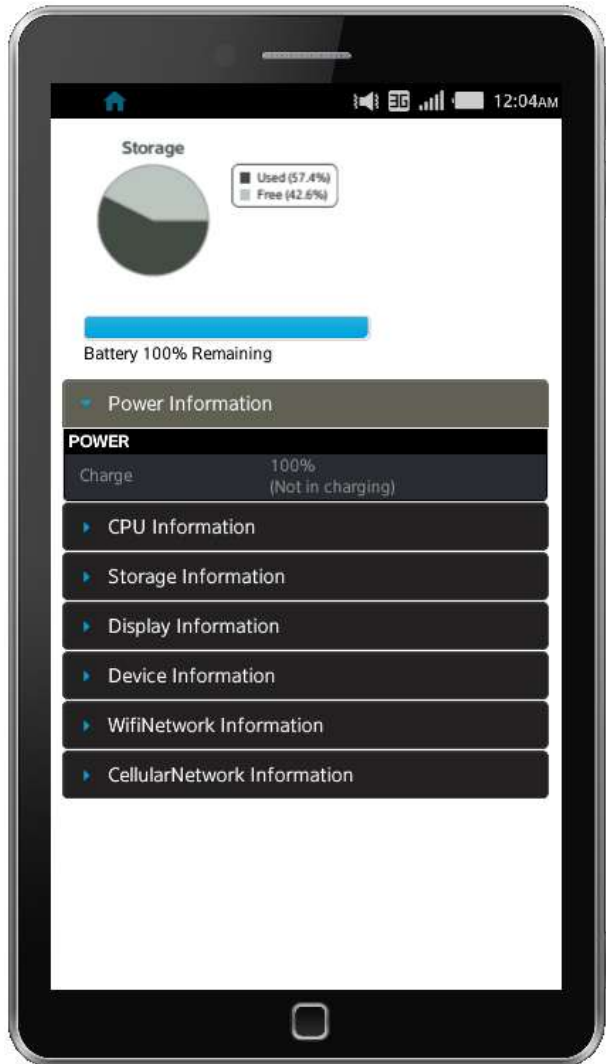 - Find Tizen APIs & avoid typing errors

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Emulator

- **Virtual machine**
  - based on QEMU
  - x86 support
    (ARM support planned for future)

- **Emulator Manager**
  - configure screen resolution & RAM size
  - create multiple images

- **HW Virtualization support**
  - KVM (Kernel-based Virtual Machine in Linux) & HAXM (Hardware Accelerated eXecution Manager in Windows)
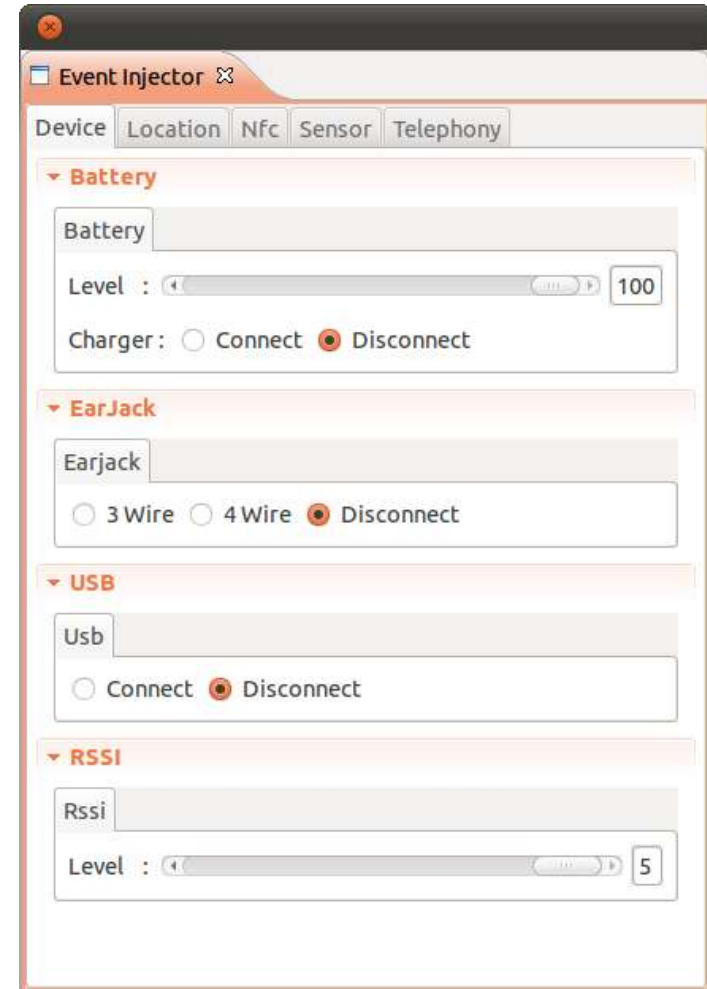
Event Injector

- **Device**
  - device levels & connections
- **Location**
  - virtual GPS with the Location Injector
- **NFC**
  - attach & detach an NFC tag
- **Sensor**
  - inject position & motion based events
- **Telephony**
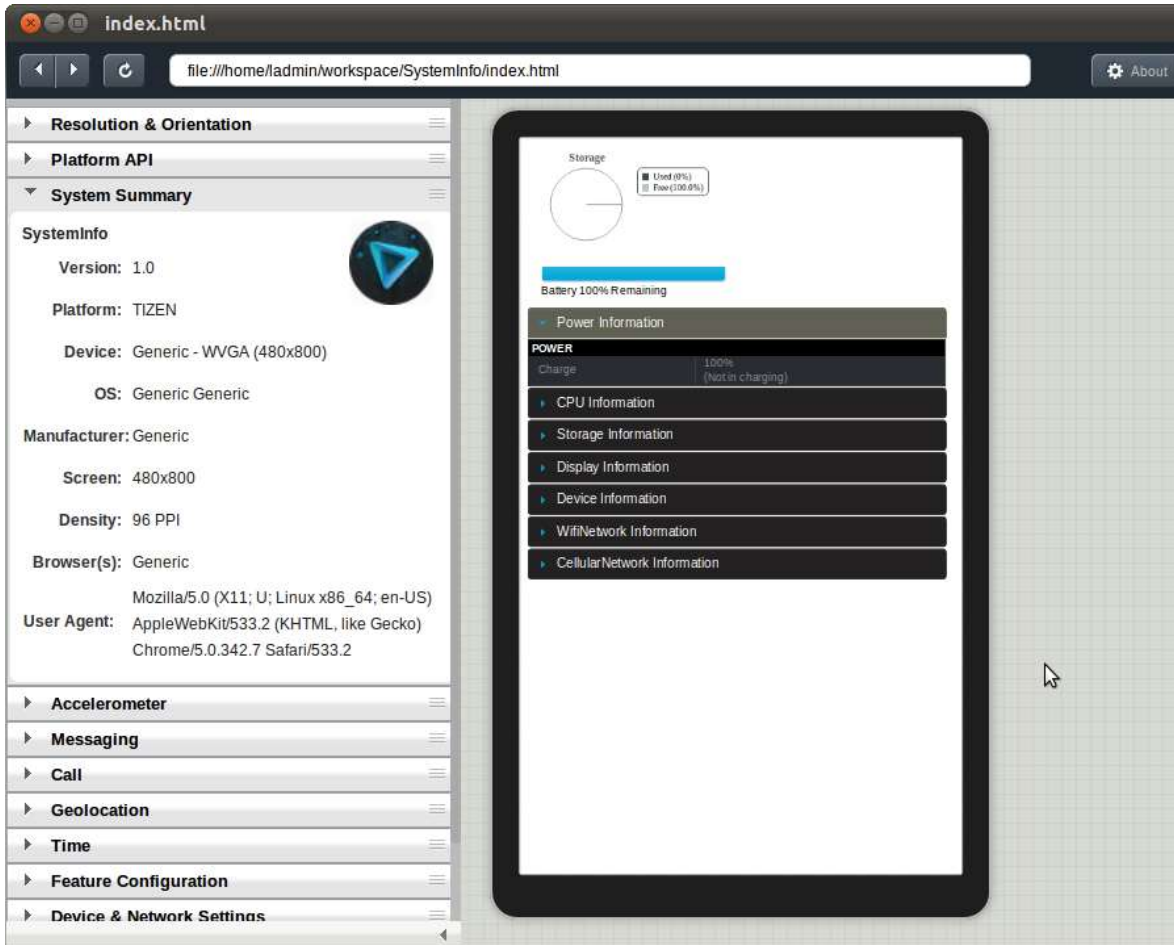 - generate SMS messages & calls

Simulator

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Project Management & Easy Code Editing	Emulator & Event Injector	Simulator	Debugging & Profiling	Multiplicity

- Quickly run & debug Tizen web applications

- Based on Ripple-UI Framework & runs on Google Chrome
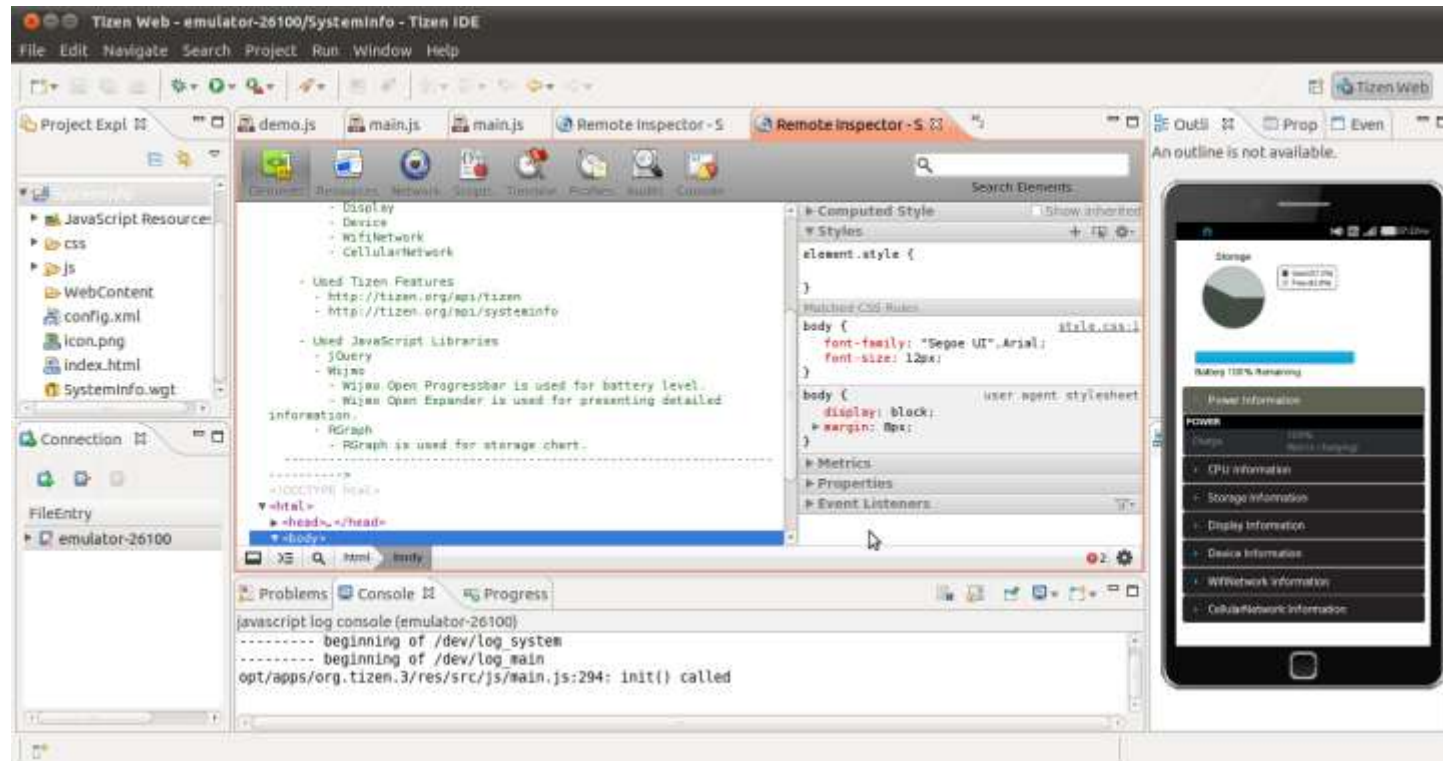
- Simulates Tizen Web APIs via JavaScript backend

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Debugging and Profiling

Project Management & Easy Code Editing	Emulator & Event Injector	Simulator	Debugging & Profiling	Multiplicity

- ## Remote Inspector, integrated in Tizen SDK
  - JavaScript Debugging, DOM Inspection, CSS Style Inspection, Resources Inspection, Timeline and Profiles

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Multiplicity

- **Multi-OS**
  - Tizen SDK runs in Windows (XP/7) & Linux (Ubuntu)

- **Multi-device**
  - The emulator enables you to test one app on multiple devices

- **Multi-Instance**
  - Concurrent execution of multiple emulator & real device instances
  - IDE supports multi-project debugging (e.g., testing device-to-device communication app)

- **A tour of the IDE**

- **How to use the Emulator**

- **The Simulator and other tools**

- **Documentation**

Conclusion

- Introduced the SDK features

- Shown how to use the IDE, Emulator, Simulator

- Shown the documentation: APIs and tutorials

- Tizen 1.0 SDK(Larkspur) is available now
  : download from https://developer.tizen.org/sdk

- Development is ongoing and includes:
  - Web app GUI Builder
  - Static/dynamic analysis tools for web app
  - ARM emulator
  - Event injector improvements