Tizen课程项目报告  
《OMemo》

## 项目简介

OMemo是一款轻量级的备忘录应用，可以用来记录未来计划、日常琐事甚至是课程作业等事项以防遗忘。用户可以通过OMemo新建、查看、查找以及删除一条便签，已有便签则会按照建立时间顺序排列在列表中以供查看。总之，OMemo是一个轻巧但功能基本齐全的备忘录，也是每个人日常生活的小帮手。

## 需求分析

用户在使用OMemo时可能会有以下需求：

1.新建一条备忘录

2.查看已有的备忘录

3.修改已有的备忘录

4.删除某条已有的备忘录

5.从大量备忘录中查找一条带有某些关键字的备忘录

## 概要设计

OMemo基于TIZEN Web Project开发，主要使用了HTML与JavaScript技术，同时引用了jQuery和jQuery Mobile两个JavaScript库。针对用户需求，在App中使用了init、addMemo、loadMemo、displayMemos、deleteMemo等函数作为借口。

|  |  |
| --- | --- |
| 接口 | 接口功能 |
| init | 初始化应用，并绑定事件处理函数等 |
| addMemo | 新建一条备忘录 |
| loadMemo | 载入一条已有的备忘录 |
| displayMemos | 在主页面中以列表形式展示所有的备忘录 |
| deleteMemo | 删除一条备忘录 |

## 核心算法

OMemo核心算法代码如下图所示。

$(function(){

var OMemo = {};

(function(app){

var $ul = $('#memo-list'),

li = ['<li>',

'<a href="#">',

'<h2>TITLE</h2>',

'<p>CONTENT</p>',

'<p class="ui-li-aside"><strong>TIME</strong></p>',

'<a href="#confirm" data-rel="popup" data-position-to="window" data-transition="pop" class="delete">Delete</a>',

'</li>'].join('');

app.init = function(){

app.bindings();

app.displayMemos();

};

app.bindings = function(){

$('#btnNewMemo').on('click', function(e){

e.preventDefault();

$('#time-new-memo').text("Last modified: "+app.getCurrentTime());

$.mobile.changePage('#new-memo-page');

});

$('#btnCancel').on('click', function(e){

e.preventDefault();

$('#memo-title').val("");

$('#memo-content').val("");

window.history.back();

});

$('#btnSave').on('click', function(e){

e.preventDefault();

app.addMemo(

$('#memo-title').val(),

$('#memo-content').val()

);

});

$('#btnDelete').on('click', function(e){

e.preventDefault();

var title = $('#memo-title-display').val();

app.deleteMemo(title);

});

$('#btnSaveDisplay').on('click', function(e){

e.preventDefault();

app.addMemo(

$('#memo-title-display').val(),

$('#memo-content-display').val()

);

});

$(document).on('click', '#memo-list li', function(e){

e.preventDefault();

var html = $(this)[0].innerHTML;

var title = html.match(/<h2>(.\*?)</)[0].replace("<h2>", "").replace("<", "");

app.loadMemo(title);

});

$(document).on('click', '.delete', function(e){

e.preventDefault();

e.stopPropagation();

var html = $(this).parent("li")[0].innerHTML;

var title = html.match(/<h2>(.\*?)</)[0].replace("<h2>", "").replace("<", "");

app.deleteMemo(title);

$.mobile.changePage('#main-page');

});

window.addEventListener( 'tizenhwkey', function( ev ) {

if( ev.keyName === "back" ) {

var page = document.getElementsByClassName( 'ui-page-active' )[0],

pageid = page ? page.id : "";

if( pageid === "main-page" ) {

try {

tizen.application.getCurrentApplication().exit();

} catch (ignore) {

}

} else {

window.history.back();

}

}

} );

};

app.loadMemo = function(title){

var memos = app.getMemos(),

times = app.getTimes(),

memo = memos[title],

time = times[title],

$memoTitle = $('#memo-title-display'),

$memoContent = $('#memo-content-display'),

$timeFlag = $('#time-display-memo');

$memoTitle.val(title);

$memoContent.val(memo);

$timeFlag.text("Last modified: "+time);

$.mobile.changePage('#display-memo-page');

};

app.addMemo = function(title, content){

if (title == "" || title.replace(/\s\*/g, "").length == 0) {

$('#memo-title').val("");

$('#memo-content').val("");

$.mobile.changePage('#main-page');

return;

}

var memos = localStorage['OMemo'],

times = localStorage['Time'],

memosObj,

timesObj;

if (memos === undefined || memos === '') {

memosObj = {};

} else {

memosObj = JSON.parse(memos);

}

if (times === undefined || times === '') {

timesObj = {};

} else {

timesObj = JSON.parse(times);

}

if (memosObj[title] != undefined) {

if (memosObj[title] != content) {

delete memosObj[title];

} else {

app.displayMemos();

return;

}

};

memosObj[title] = content;

timesObj[title] = app.getCurrentTime();

localStorage['OMemo'] = JSON.stringify(memosObj);

localStorage['Time'] = JSON.stringify(timesObj);

$('#memo-title').val("");

$('#memo-content').val("");

app.displayMemos();

};

app.getMemos = function(){

var memos = localStorage['OMemo'];

return JSON.parse(memos);

};

app.getTimes = function(){

var times = localStorage['Time'];

return JSON.parse(times);

};

app.displayMemos = function(){

var memosObj = app.getMemos(),

timesObj = app.getTimes(),

html = '',

memo,

checkForListDivider = {};

var memoArray = new Array();

for (memo in memosObj) { memoArray.push(memo); }

for (var i = memoArray.length-1; i >= 0; i--) {

var memo = memoArray[i];

var time = timesObj[memo].split("")[0];

if (checkForListDivider[time] != true) {

html += '<li data-role="list-divider">T</li>'.replace(/T/g, time);

checkForListDivider[time] = true;

}

html += li.replace(/TITLE/g, memo.replace(/-/g,' '))

.replace(/CONTENT/g, memosObj[memo])

.replace(/TIME/g, timesObj[memo].replace(time+' ', ""));

}

$ul.html(html).listview('refresh');

$.mobile.changePage('#main-page');

};

app.deleteMemo = function(title) {

var memosObj = app.getMemos(),

timesObj = app.getTimes();

delete memosObj[title];

localStorage['OMemo'] = JSON.stringify(memosObj);

delete timesObj[title];

localStorage['Time'] = JSON.stringify(timesObj);

app.displayMemos();

}

app.getCurrentTime = function () {

var now = new Date();

var year = now.getFullYear();

month = now.getMonth() + 1;

day = now.getDate();

hh = now.getHours();

mm = now.getMinutes();

var time = year + "-";

if(month < 10) time += "0";

time += month + "-";

if(day < 10) time += "0";

time += day + "";

if(hh < 10) time += "0";

time += hh + ":";

if (mm < 10) time += '0';

time += mm;

return(time);

}

app.init();

})(OMemo);

});

## 软件功能界面

## 