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| MawPaw Source TOC |
| .html and .bas Quick Ref Guide |

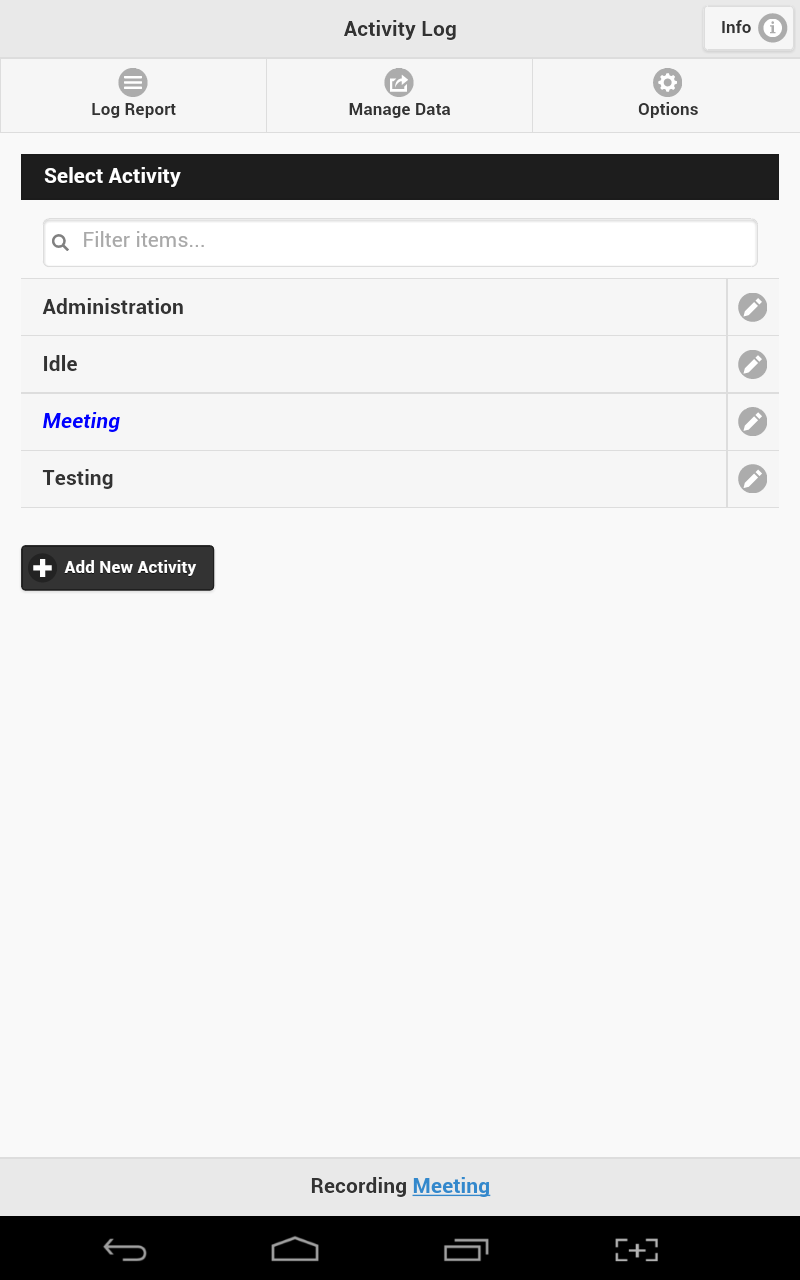
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**Orange = Variables**

**Green = Text**

**Blue = Subroutines**

**Yellow = Basic Text**

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# <!DOCTYPE html>

<html>

<head>

<meta charset="utf-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

<title>Activity Log</title>

<link rel="stylesheet" href="jquery.mobile-1.4.0.min.css" />

<script src="jquery-1.10.2.min.js"></script>

<script src="jquery.mobile-1.4.0.min.js"></script>

<script type="text/javascript">

var options = {};

var reportOffSet = 0;

$(document).on("pagebeforeshow", "#options-page", function() {

$("#timer\_interval-opt").val(options.timer\_interval).slider("refresh");

$("#record\_threshold-opt").val(options.record\_threshold).slider("refresh");

$("#default\_email-opt").val(options.default\_email);

$("#field\_separator-opt").val(options.field\_separator);

$("#report\_weekstart-opt").val(options.report\_weekstart).selectmenu("refresh");

$("#report\_interval-opt").val(options.report\_interval).selectmenu("refresh");

$("#report\_round-opt").val(options.report\_round).selectmenu("refresh");

});

$(document).on("pagebeforeshow", "#main-page", function() {

$("#main-page div:jqmData(role='content') ul").empty();

doDataLink('LOD:main');

});

$(document).on("pagebeforeshow", "#manage-page", function() {

$("#manage-page div:jqmData(role='content') fieldset:jqmData(role='controlgroup')").empty();

doDataLink('LOD:mgmt');

});

$(document).on("pagebeforeshow", "#report-page", function() { doDataLink('RPD:'+reportOffSet); });

function doDataLink(data) { Android.dataLink(data); }

function doSetOptions(opts) {

options = opts;

}

## function doSaveOptions() {

options.timer\_interval = $("#timer\_interval-opt").val();

options.record\_threshold = $("#record\_threshold-opt").val();

options.default\_email = $("#default\_email-opt").val();

options.field\_separator = $("#field\_separator-opt").val();

options.report\_weekstart = $("#report\_weekstart-opt").val();

options.report\_interval = $("#report\_interval-opt").val();

options.report\_round = $("#report\_round-opt").val();

opts = "OPT:"

for(var name in options) {

var value = options[name];

opts += name + "=" + value + "\n";

}

opts = opts.substring(0, opts.length-1);

doDataLink(opts);

doDataLink("POP:Options saved");

}

## function doUpdateStatus(id, action) {

var status = $("div:jqmData(role='footer') h4");

var item = $("#item-" + id);

var anchor = $("#item-" + id + " a:first-of-type");

var act\_name = anchor.text();

if (id == "") {

status.html("Not recording");

} else if (action == "-") {

status.html("Not recording");

anchor.html(act\_name);

} else {

status.html('Recording <a href="javascript:doDataLink(\'RUN:' + id + '\')">' + act\_name + '</a>');

anchor.html('<em style="color:#00f">' + act\_name + '</em>');

}

$("div:jqmData(role='footer')").toolbar("refresh");

}

function doAddActivity(page, id, name) {

var markup;

if (page == 'main') {

markup = '<li id="item-' + id + '"><a href="javascript:doDataLink(\'TAP:' + id + '\')">' + name + '</a>\n'

+ '<a href="javascript:doEditActivity(\'' + id + '\')">Edit activity</a></li>\n';

$("#main-page div:jqmData(role='content') ul").append(markup).listview('refresh');

} else {

markup = '<input name="check-' + id + '" id="check-' + id + '" type="checkbox" value="' + name + '">\n'

+'<label for="check-' + id + '">' + name + '</label>\n';

$("#manage-page div:jqmData(role='content') fieldset:jqmData(role='controlgroup')").append(markup).enhanceWithin();

}

}

## function doEditActivity(id) {

$("#activity-name").val($("#item-" + id + " a:first-of-type").text());

$("#activity-item-id").val(id);

$("#edit-activity").popup("open");

}

## function doSaveActivity() {

var orig = $("#activity-item-id").val();

var name = $("#activity-name").val();

$("#item-" + orig + " a:first-of-type").html(name);

$("#edit-activity").popup("close");

doDataLink("SAV:" + orig + "\n" + name);

}

## function actOnSelection(datalink) {

$("#confirm-action-selected").popup("close");

$("#manage-page div:jqmData(role='content') fieldset:jqmData(role='controlgroup')").empty();

doDataLink(datalink);

}

## function getSelectedNames(selection) {

var count = 0;

$("#manage-page :checkbox:checked").each(function() {

if (count > 0) {

selection.txt += ", ";

selection.ids += ",";

}

selection.txt += $(this).val();

selection.ids += $(this).attr('id').replace('check-', '');

count++;

});

return count;

}

## function doOnSelected(action) {

var selection = {txt:'', ids:''};

var count = getSelectedNames(selection);

var limit = (action == 'Merge') ? 2 : 1;

var dlink = (action == 'Merge') ? 'SMG:' : 'SDL:';

if (count < limit) {

var x = (limit == 1) ? 'y' : 'ies';

selection.txt = '<em>Please select at least ' + limit + ' activit' + x + '.</em>';

$("#confirm-action-selected a:first-of-type").addClass('ui-disabled');

} else {

$("#confirm-action-selected a:first-of-type").removeClass('ui-disabled');

$("#confirm-action-selected a:first-of-type").attr('href', "javascript:actOnSelection('" + dlink + selection.ids + "')");

}

$("#confirm-action-selected p:first-of-type").html(selection.txt);

$("#confirm-action-selected h3").html(action + " selected activities");

$("#confirm-action-selected").popup("open");

}

## function actOnAllData(datalink) {

$("#confirm-action-all").popup("close");

doDataLink(datalink);

}

## function doOnAllData(action) {

$("#confirm-action-all h3").html(action + " all log records");

$("#confirm-action-all a:first-of-type").attr('href', "javascript:actOnAllData('ALL:" + action + "')");

$("#confirm-action-all").popup("open");

}

## function doReportData(dates, daily, daydo) {

var markup = '';

var week\_tot = 0;

for (var i = 0; i < dates.length; i++) {

markup += '\n<li data-role="list-divider">' + dates[i] + ' <span class="ui-li-count">' + daily[dates[i]] + '</span></li>'

week\_tot += daily[dates[i]];

var sortedKeys = new Array();

for (var name in daydo[dates[i]]) {

sortedKeys.push(name);

}

sortedKeys.sort();

for (var j = 0; j < sortedKeys.length; j++) {

name = sortedKeys[j];

var duration = daydo[dates[i]][name];

markup += '\n<li>' + name + ' <span class="ui-li-count">' + duration + '</span></li>';

}

}

$("#report-page div:jqmData(role='content') ul").html(markup).listview('refresh');

$("#report-page div:jqmData(role='content') h2").html("Week total hours: " + week\_tot);

}

</script>

</head>

<body>

# <div data-role="page" id="main-page">

<div data-role="header" data-position="fixed" data-id="the-header">

<h1>Activity Log</h1>

<a href="#info-main-page" class="ui-btn-right ui-btn ui-shadow ui-btn-inline ui-mini ui-corner-all ui-btn-icon-right ui-icon-info" data-transition="slideup">Info</a>

<div data-role="navbar">

<ul>

<li><a href="#report-page" data-icon="bars" data-transition="slideup">Log Report</a></li>

<li><a href="#manage-page" data-icon="action" data-transition="slideup">Manage Data</a></li>

<li><a href="#options-page" data-icon="gear" data-transition="slideup">Options</a></li>

</ul>

</div>

</div>

## <div data-role="content">

<div class="ui-corner-all">

<div class="ui-bar ui-bar-b">

<h2>Select Activity</h2>

</div>

<div class="ui-body">

<ul data-role="listview" data-filter="true" data-split-icon="edit">

</ul>

<p />

</div>

</div>

#### <div data-role="fieldcontain">

<a href="javascript:doDataLink('ADD:New Activity')" class="ui-shadow ui-btn ui-mini ui-corner-all ui-btn-inline ui-btn-b ui-btn-icon-left ui-icon-plus">Add New Activity</a>

</div>

</div>

<div data-role="footer" data-position="fixed" data-id="the-footer">

<h4>...</h4>

</div>

<div data-role="popup" id="edit-activity" class="ui-content" data-overlay-theme="b">

<h3>Edit activity</h3>

<form action="javascript:doSaveActivity()" method="">

<label for="activity-name">Activity name:</label>

<input type="text" name="name" id="activity-name" value="" />

<input type="hidden" name="item-id" id="activity-item-id" value="" />

<a href="javascript:doSaveActivity()" class="ui-shadow ui-btn ui-mini ui-corner-all ui-btn-inline ui-btn-b ui-btn-icon-left ui-icon-check">Save</a>

<a href="#" data-rel="back" class="ui-shadow ui-btn ui-mini ui-corner-all ui-btn-inline ui-btn-icon-right ui-icon-back">Cancel</a>

</form>

</div>

</div>

# <div data-role="page" id="report-page">

<div data-role="header" data-position="fixed" data-id="the-header" data-add-back-btn="true">

<h1>Activity Log Report</h1>

<a href="#info-report-page" class="ui-btn-right ui-btn ui-shadow ui-btn-inline ui-mini ui-corner-all ui-btn-icon-right ui-icon-info" data-transition="slideup">Info</a>

<div data-role="navbar">

<ul>

<li><a href="javascript:doDataLink('RPD:'+(--reportOffSet))" data-icon="arrow-l">Previous Week</a></li>

<li><a href="javascript:reportOffSet=0;doDataLink('RPD:'+reportOffSet)" data-icon="minus">Current Week</a></li>

<li><a href="javascript:doDataLink('RPD:'+(++reportOffSet))" data-icon="arrow-r">Following Week</a></li>

</ul>

</div>

</div>

## <div data-role="content">

<div class="ui-corner-all">

<div class="ui-bar ui-bar-b">

<h2>...</h2>

</div>

<div class="ui-body">

<ul data-role="listview" data-filter="true" data-inset="false">

</ul>

<p />

</div>

</div>

#### <div data-role="fieldcontain">

<a href="javascript:doDataLink('RPS:'+reportOffSet)" class="ui-shadow ui-btn ui-mini ui-corner-all ui-btn-inline ui-btn-b ui-btn-icon-left ui-icon-mail">Send</a>

</div>

</div>

<div data-role="footer" data-position="fixed" data-id="the-footer">

<h4>...</h4>

</div>

</div>

# <div data-role="page" id="manage-page">

<div data-role="header" data-position="fixed" data-id="the-header" data-add-back-btn="true">

<h1>Activity Log Management</h1>

<a href="#info-manage-page" class="ui-btn-right ui-btn ui-shadow ui-btn-inline ui-mini ui-corner-all ui-btn-icon-right ui-icon-info" data-transition="slideup">Info</a>

</div>

## <div data-role="content">

<form action="" method="">

<div data-role="collapsible" data-theme="b" data-collapsed="false">

<h2>Manage Activities</h2>

<fieldset data-role="controlgroup" data-iconpos="right" data-filter="true">

</fieldset>

#### <div data-role="fieldcontain">

<a href="javascript:doOnSelected('Merge')" class="ui-shadow ui-btn ui-mini ui-corner-all ui-btn-inline ui-btn-b ui-btn-icon-left ui-icon-recycle">Merge Selected</a>

<a href="javascript:doOnSelected('Delete')" class="ui-shadow ui-btn ui-mini ui-corner-all ui-btn-inline ui-btn-b ui-btn-icon-left ui-icon-delete">Delete Selected</a>

</div>

</div>

<div data-role="collapsible" data-theme="b">

<h2>Manage Log</h2>

#### <div data-role="fieldcontain">

<a href="javascript:doOnAllData('Send')" class="ui-shadow ui-btn ui-mini ui-corner-all ui-btn-inline ui-btn-b ui-btn-icon-left ui-icon-mail">Send All Data</a>

<a href="javascript:doOnAllData('Delete')" class="ui-shadow ui-btn ui-mini ui-corner-all ui-btn-inline ui-btn-b ui-btn-icon-left ui-icon-delete">Delete All Data</a>

</div>

</div>

</form>

</div>

<div data-role="footer" data-position="fixed" data-id="the-footer">

<h4>...</h4>

</div>

<div data-role="popup" id="confirm-action-selected" class="ui-content" data-overlay-theme="b">

<h3>...</h3>

<p>...</p>

<p>Do you really want to proceed?</p>

<form action="" method="">

<a href="#" class="ui-shadow ui-btn ui-mini ui-corner-all ui-btn-inline ui-btn-b ui-btn-icon-left ui-icon-check">Confirm</a>

<a href="#" data-rel="back" class="ui-shadow ui-btn ui-mini ui-corner-all ui-btn-inline ui-btn-icon-right ui-icon-back">Cancel</a>

</form>

</div>

<div data-role="popup" id="confirm-action-all" class="ui-content" data-overlay-theme="b">

<h3>...</h3>

<p>Do you really want to proceed?</p>

<form action="" method="">

<a href="#" class="ui-shadow ui-btn ui-mini ui-corner-all ui-btn-inline ui-btn-b ui-btn-icon-left ui-icon-check">Confirm</a>

<a href="#" data-rel="back" class="ui-shadow ui-btn ui-mini ui-corner-all ui-btn-inline ui-btn-icon-right ui-icon-back">Cancel</a>

</form>

</div>

</div>

# <div data-role="page" id="options-page">

<div data-role="header" data-position="fixed" data-id="the-header" data-add-back-btn="true">

<h1>Activity Log Options</h1>

<a href="#info-options-page" class="ui-btn-right ui-btn ui-shadow ui-btn-inline ui-mini ui-corner-all ui-btn-icon-right ui-icon-info" data-transition="slideup">Info</a>

</div>

## <div data-role="content">

<form action="" method="">

<div data-role="collapsible" data-theme="b" data-collapsed="false">

<h2>Application</h2>

#### <div data-role="fieldcontain">

<label for="timer\_interval-opt">Timer interval (min):</label>

<input type="range" name="timer\_interval-opt" id="timer\_interval-opt" min="0" max="60" data-highlight="true" />

</div>

#### <div data-role="fieldcontain">

<label for="record\_threshold-opt">Record threshold (sec):</label>

<input type="range" name="record\_threshold-opt" id="record\_threshold-opt" min="0" max="60" step="5" data-highlight="true" />

</div>

#### <div data-role="fieldcontain">

<label for="default\_email-opt">Default e-mail:</label>

<input type="email" name="default\_email-opt" id="default\_email-opt" value="" />

</div>

#### <div data-role="fieldcontain">

<label for="field\_separator-opt">Field separator:</label>

<input type="text" name="field\_separator-opt" id="field\_separator-opt" value="" />

</div>

</div>

<div data-role="collapsible" data-theme="b">

<h2>Report</h2>

#### <div data-role="fieldcontain">

<label for="report\_weekstart-opt" class="select">Week starts on:</label>

<select name="report\_weekstart-opt" id="report\_weekstart-opt">

<option value="2">Monday</option>

<option value="3">Tuesday</option>

<option value="4">Wednesday</option>

<option value="5">Thursday</option>

<option value="6">Friday</option>

<option value="7">Saturday</option>

<option value="1">Sunday</option>

</select>

</div>

#### <div data-role="fieldcontain">

<label for="report\_interval-opt" class="select">Duration Interval:</label>

<select name="report\_interval-opt" id="report\_interval-opt">

<option value="1">1 minute</option>

<option value="5">5 minutes</option>

<option value="15">15 minutes</option>

<option value="30">30 minutes</option>

</select>

</div>

#### <div data-role="fieldcontain">

<label for="report\_round-opt" class="select">Round method:</label>

<select name="report\_round-opt" id="report\_round-opt">

<option value="round">Round to nearest</option>

<option value="ceil">Always round up</option>

<option value="floor">Always round down</option>

</select>

</div>

</div>

#### <div data-role="fieldcontain">

<a href="javascript:doSaveOptions()" class="ui-shadow ui-btn ui-mini ui-corner-all ui-btn-inline ui-btn-b ui-btn-icon-left ui-icon-check">Apply Changes</a>

</div>

</form>

</div>

<div data-role="footer" data-position="fixed" data-id="the-footer">

<h4>...</h4>

</div>

</div>

# <div data-role="page" id="info-main-page">

<div data-role="header" data-position="fixed" data-id="the-header" data-add-back-btn="true">

<h1>Info: Activity Log</h1>

<a href="#about-page" class="ui-btn-right ui-btn ui-shadow ui-btn-inline ui-mini ui-corner-all ui-btn-icon-right ui-icon-info" data-transition="slideup">About</a>

</div>

## <div data-role="content">

<p>The main page presents a searchable list of all registered activities.</p>

<p>By tapping on the list, an activity can be started or stopped.

Starting an activity stops the previously running one if any.

The running activity is highlighted and reported in status bar of all pages.

By tapping on the activity name in the status bar the current activity time is shown.</p>

<p>The user can add activities by tapping the button below the list. The newly created activity is named "New Activity".

Action names can be edited by tapping on the icon at the right of the activity.</p>

<p>While the list is loaded in alphabetical order, adding or editin activities don't rearrange the sort order.

A reload of the list, hence its reordering, can be obtained by moving to other pages.</p>

<p>The navigation bar links to the report and the management pages as well as to the options page.</p>

</div>

<div data-role="footer" data-position="fixed" data-id="the-footer">

<h4>...</h4>

</div>

</div>

# <div data-role="page" id="info-report-page">

<div data-role="header" data-position="fixed" data-id="the-header" data-add-back-btn="true">

<h1>Info: Activity Log report</h1>

<a href="#about-page" class="ui-btn-right ui-btn ui-shadow ui-btn-inline ui-mini ui-corner-all ui-btn-icon-right ui-icon-info" data-transition="slideup">About</a>

</div>

## <div data-role="content">

<p>The report page presents the aggregated weekly activity log, starting from the current one

, and providing a navigation bar to move to previous and following weeks.</p>

<p>The report presents the data grouped by day, and each activity log duration is aggregated.

The aggregated duration value is rounded according to the configuration (see the <a href="#info-manage-page">options</a>).</p>

<p>The send button allows the user to e-mail the displayes report in textual format.</p>

</div>

<div data-role="footer" data-position="fixed" data-id="the-footer">

<h4>...</h4>

</div>

</div>

# <div data-role="page" id="info-manage-page">

<div data-role="header" data-position="fixed" data-id="the-header" data-add-back-btn="true">

<h1>Info: Activity Log Management</h1>

<a href="#about-page" class="ui-btn-right ui-btn ui-shadow ui-btn-inline ui-mini ui-corner-all ui-btn-icon-right ui-icon-info" data-transition="slideup">About</a>

</div>

## <div data-role="content">

<p>The management page presents a first section with the list of activities, providing for selecting one or more of them.

The user can then decide to merge or delete the selected ones.</p>

<p>The merge action results in all data log being reassigned to one of the selected activities.

This activity is then renamed to include the name of all the other ones, and these are deleted.</p>

<p>The delete action first removes all related data log, and finally all selected activities.</p>

<p>The second section of the page provides actions on the whole data log:

<ul>

<li>for sending it via e-mail;</li>

<li>for removing it completely.</li>

</p>

</div>

<div data-role="footer" data-position="fixed" data-id="the-footer">

<h4>...</h4>

</div>

</div>

# <div data-role="page" id="info-options-page">

<div data-role="header" data-position="fixed" data-id="the-header" data-add-back-btn="true">

<h1>Info: Activity Log Options</h1>

<a href="#about-page" class="ui-btn-right ui-btn ui-shadow ui-btn-inline ui-mini ui-corner-all ui-btn-icon-right ui-icon-info" data-transition="slideup">About</a>

</div>

## <div data-role="content">

<p>The option page allows the user to manage the application options.</p>

<h3>The timer interval in minutes</h3>

<p>This is the only function of the application that requires it to be running in order to work.</p>

<p>By setting it to 0, the timer is disabled. By setting it to anything up to 60, it runs and a beep is emitted any given minutes.</p>

<p>This might be used as a sort of reminder or attention catcher.</p>

<h3>The recording threshold in seconds</h3>

<p>Any recording below the threshold is discarded.</p>

<h3>Default E-Mail to send reports and data to</h3>

<p>The two functionalities that send e-mails will default to use this address.</p>

<h3>The field separator<h3>

<p>One or more characters used to separate the fields. It defaults to comma.</p>

<h3>The first day of your week</h3>

<p>The reports display weeks taking this into consideration.</p>

<p>It defaults to Monday, but in some instances it might be useful to have it set to a different day.</p>

<h3>The Duration interval and the rounding method.</h3>

<p>The aggregated duration can be rounded to intervals of 1, 5, 15, or 30 minutes.</p>

<p>The rounding can be to the nearest interval, always up to, or always down to.</p>

</div>

<div data-role="footer" data-position="fixed" data-id="the-footer">

<h4>...</h4>

</div>

</div>

# <div data-role="page" id="about-page">

<div data-role="header" data-position="fixed" data-id="the-header" data-add-back-btn="true">

<h1>About Activity Log</h1>

</div>

## <div data-role="content">

<p>This app records the time spent at doing an activity, and generates weekly reports of the log.</p>

<p>It has been developed using <em>RFO BASIC!</em> (http://laughton.com/basic/) for the backend management of the database,

and of the program functionalities, and <em>jQuery mobile</em> (http://jquerymobile.com/) for the user interface.</p>

<p>The UI provides several pages:

<ul>

<li>The main page shows the activities and provides for recording, adding, and editing activities.</li>

<li>The report page shows the weekly logs and allows for e-mailing one week log.</li>

<li>The management page shows the activities and provides management actions.</li>

<li>The options page shows the application options.</li>

<li>The info pages shows basic instructions, information and credits.</li>

</ul>

</p>

<p>The app has been developed by <em>cspa</em> and released to the BASIC! community.</p>

<p>I hope you enjoy it.</p>

</div>

<div data-role="footer" data-position="fixed" data-id="the-footer">

<h4>...</h4>

</div>

</div>

</body>

</html>

BUNDLE.CREATE G % Contains all globally available values. Referenced as 1!

GOSUB FUNCTION\_DEFITIONS

CALL CheckEnvironment()

CALL OpenDB()

CALL LoadSound()

CALL LoadAppHtml()

DO

DO

## HTML.GET.DATALINK data$

UNTIL data$ <> ""

type$ = LEFT$(data$, 4)

data$ = MID$(data$, 5)

IF type$ = "DAT:" THEN

type$ = LEFT$(data$, 4)

data$ = MID$(data$, 5)

ENDIF

IF type$ = "BAK:" THEN

IF data$ = "1" THEN HTML.GO.BACK ELSE D\_U.BREAK

ELSEIF type$ = "LOD:" THEN

CALL PushActivityList(data$)

IF data$ = "main" THEN

CALL PushRunningActivity()

BUNDLE.CONTAIN G, "active\_timer", active

IF !active THEN

CALL LoadOptions()

CALL StartStopTimer()

ENDIF

ELSEIF data$ <> "mgmt" THEN

PRINT "Unexpected datalink "; type$; data$

D\_U.BREAK

ENDIF

ELSEIF type$ = "TAP:" THEN

CALL StartStopActivity(data$)

ELSEIF type$ = "RUN:" THEN

CALL ShowRunningTime(data$)

ELSEIF type$ = "ADD:" THEN

CALL AddActivity(data$)

ELSEIF type$ = "SAV:" THEN

CALL UpdateActivity(data$)

CALL PushRunningActivity()

ELSEIF type$ = "OPT:" THEN

CALL UpdateOptions(data$)

CALL LoadOptions()

CALL StartStopTimer()

ELSEIF type$ = "RPD:" THEN

CALL PushReportData(VAL(data$))

ELSEIF type$ = "RPS:" THEN

CALL SendWeeklyReport(VAL(data$))

ELSEIF type$ = "ALL:" THEN

IF data$ = "Send" THEN

CALL SendAllData()

ELSEIF data$ = "Delete" THEN

CALL DeleteAllData()

ELSE

PRINT "Unexpected datalink "; type$; data$

D\_U.BREAK

ENDIF

ELSEIF type$ = "SMG:" THEN

CALL MergeSelectedActivities(data$)

ELSEIF type$ = "SDL:" THEN

CALL DeleteSelectedActivities(data$)

ELSEIF type$ = "POP:" THEN

POPUP data$, 0, 0, 0

! ELSEIF type$ = "LNK:" THEN

! HTML.LOAD.URL data$

! TODO: find why moving to external link

! , JQM doesn't redraw the page.

ELSE

PRINT "Unexpected datalink "; type$; data$

D\_U.BREAK

ENDIF

UNTIL 0

CALL CloseAll()

END

|  |  |
| --- | --- |
| HTML to BASIC Application Communications Protocol | |
| LOD: | LO 01 |
| TAP: | TA |
| RUN: | RU |
| ADD: | AD |
| SAV: | SA |
| OPT: | OP |
| RPD: | RD |
| RPS: | RS |
| ALL: | AL |
| SMG: | SM |
| SDL: | SD |
| POP: | PO |
| LNK: | LN |
| Activity | Activity01 |
| Activity | Activity02 |
| Activity | Activity03 |
| Activity | Activity04 |

**Note: Last 2 digits go from 00 to FF using hexadecimal notation**

FUNCTION\_DEFITIONS:

FN.DEF CheckEnvironment()

! Check if running as APK.

! Set home accordingly.

FILE.ROOT tmp$

BUNDLE.PUT 1, "isAPK", IS\_IN("rfo-basic", tmp$) = 0

BUNDLE.GET 1, "isAPK", IS\_APK

BUNDLE.PUT 1, "assets", "activitylog/"

IF IS\_APK THEN

BUNDLE.PUT 1, "home", ""

FILE.EXISTS found, home$ + "version.txt"

IF !found THEN

TEXT.OPEN w, tmp, home$ + "version.txt"

TEXT.WRITELN tmp, "1.0.0"

TEXT.CLOSE tmp

ENDIF

FILE.EXISTS found, "../databases"

IF !found THEN FILE.MKDIR "../databases"

ELSE

BUNDLE.PUT 1, "home", "activitylog/"

ENDIF

FN.END

FN.DEF OpenDB()

! Open and create the DB with default values.

SQL.OPEN DB, "activitylog.db"

BUNDLE.PUT 1, "DB", DB

SQL.QUERY cur, DB, "sqlite\_master", "name", "type='table' AND name='activity'"

SQL.QUERY.LENGTH found, cur

IF !found THEN

SQL.NEW\_TABLE DB, "activity", "name"

SQL.INSERT DB, "activity", "name", "Idle"

SQL.INSERT DB, "activity", "name", "Administration"

SQL.INSERT DB, "activity", "name", "Meeting"

ENDIF

SQL.QUERY cur, DB, "sqlite\_master", "name", "type='table' AND name='log'"

SQL.QUERY.LENGTH found, cur

IF !found THEN

SQL.NEW\_TABLE DB, "log", "activity", "start\_time", "end\_time", "duration"

ENDIF

SQL.QUERY cur, DB, "sqlite\_master", "name", "type='table' AND name='option'"

SQL.QUERY.LENGTH found, cur

IF !found THEN

SQL.NEW\_TABLE DB, "option", "name", "value"

SQL.INSERT DB, "option", "name", "timer\_interval", "value", "0"

SQL.INSERT DB, "option", "name", "record\_threshold", "value", "60"

SQL.INSERT DB, "option", "name", "report\_weekstart", "value", "2"

SQL.INSERT DB, "option", "name", "report\_interval", "value", "15"

SQL.INSERT DB, "option", "name", "report\_round", "value", "round"

SQL.INSERT DB, "option", "name", "default\_email", "value", ""

SQL.INSERT DB, "option", "name", "field\_separator", "value", ","

ENDIF

Fn.RTN DB

FN.END

## FN.DEF LoadOptions()

! Load the options and push them to html.

BUNDLE.GET 1, "DB", DB

SQL.QUERY cur, DB, "option", "\_id, name , value"

opts$ = ""

DO

SQL.NEXT eoq, cur, id$, name$, value$

IF !eoq THEN

BUNDLE.PUT 1, "opt." + name$, value$

IF LEN(opts$) > 0 THEN opts$ += ", "

opts$ += "'" + name$ + "':'" + value$ + "'"

ENDIF

UNTIL eoq

HTML.LOAD.URL "javascript:doSetOptions({" + opts$ + "})"

FN.END

## FN.DEF StartStopTimer()

! Start the timer.

BUNDLE.CONTAIN 1, "active\_timer", active

IF active THEN

BUNDLE.GET 1, "active\_timer", active\_timer

ELSE

active\_timer = 0

ENDIF

BUNDLE.GET 1, "opt.timer\_interval", tmp$

tmp = VAL(tmp$)

IF active\_timer <> tmp THEN

IF active\_timer THEN TIMER.CLEAR

IF tmp > 0 THEN

tmp = tmp \* 60 \* 1000

TIMER.SET tmp

ENDIF

BUNDLE.PUT 1, "active\_timer", tmp

ENDIF

FN.END

## FN.DEF LoadSound()

! Load the sound for the timer.

BUNDLE.GET 1, "home", home$

SOUNDPOOL.OPEN 1

SOUNDPOOL.LOAD tmp, home$ + "beep.mp3"

BUNDLE.PUT 1, "sound.beep", tmp

FN.END

## FN.DEF LoadAppHtml()

! Load the html part.

BUNDLE.GET 1, "assets", home$

POPUP "Loading...", 0, 0, 0

HTML.OPEN

!HTML.CLEAR.CACHE

HTML.LOAD.URL home$ + "activitylog.html"

FN.END

## FN.DEF PushActivityList(data$)

! Push the activity list to html.

BUNDLE.GET 1, "DB", DB

SQL.QUERY cur, DB, "activity", "\_id, name", "", "name ASC"

DO

SQL.NEXT eoq, cur, id$, name$

IF !eoq THEN HTML.LOAD.URL "javascript:doAddActivity('" + data$ + "', " + id$ + ", '" + name$ + "')"

UNTIL eoq

FN.END

FN.DEF PushReportData(offset\_week)

! Collect and push to html the week report data.

! The selected week is the current - offset\_week.

BUNDLE.GET 1, "DB", DB

BUNDLE.GET 1, "opt.report\_weekstart", week\_start$

wkst = VAL(week\_start$)

! Calculate the start of the week to report.

now = TIME()

TIME now, Year$, Month$, Day$, Hour$, Minute$, Second$, WeekDay, isDST

Range = (wkst - WeekDay)

IF wkst > WeekDay THEN Range -= 7

RepDay = now + Range \* 24 \* 60 \* 60 \* 1000

TIME RepDay, Year$, Month$, Day$, Hour$, Minute$, Second$, WeekDay, isDST

RepDay = TIME(Year$, Month$, Day$, 0, 0, 0)

IF offset\_week THEN RepDay += offset\_week \* 7 \* 24 \* 60 \* 60 \* 1000

! Prepare all dates to be reported.

BUNDLE.CREATE Dates

Filter$ = "DATETIME(start\_time/1000, 'unixepoch') >= DATETIME(" + STR$(RepDay/1000) + ", 'unixepoch')"

FOR i = 1 TO 7

TIME RepDay, Year$, Month$, Day$, Hour$, Minute$, Second$, WeekDay, isDST

Date$ = Year$ + "/" + Month$ + "/" + Day$

BUNDLE.CREATE DayActivities

BUNDLE.PUT Dates, Date$, DayActivities

RepDay += 24 \* 60 \* 60 \* 1000

NEXT

Filter$ += " AND DATETIME(start\_time/1000, 'unixepoch') < DATETIME(" + STR$(RepDay/1000) + ", 'unixepoch')"

! Collect activities in the date range of the selected week.

SQL.QUERY cur, DB, "log", "activity, start\_time, duration", Filter$

DO

SQL.NEXT eoq, cur, act\_id$, start$, duration$

IF !eoq & duration$ <> "" THEN

TIME VAL(start$), Year$, Month$, Day$, Hour$, Minute$, Second$, WeekDay, isDST

Date$ = Year$ + "/" + Month$ + "/" + Day$

BUNDLE.GET Dates, Date$, DayActivities

BUNDLE.CONTAIN DayActivities, act\_id$, found

IF !found

BUNDLE.PUT DayActivities, act\_id$, VAL(duration$)

ELSE

BUNDLE.GET DayActivities, act\_id$, tmp

BUNDLE.PUT DayActivities, act\_id$, tmp + VAL(duration$)

ENDIF

ENDIF

UNTIL eoq

! Retrieve the options and the activity names.

BUNDLE.GET 1, "opt.report\_interval", rep\_interval$

BUNDLE.GET 1, "opt.report\_round", method$

interval = VAL(rep\_interval$)

BUNDLE.CREATE Activities

SQL.QUERY cur, DB, "activity", "\_id, name"

DO

SQL.NEXT eoq, cur, act\_id$, act\_name$

IF !eoq THEN BUNDLE.PUT Activities, act\_id$, act\_name$

UNTIL eoq

! Sort the dates.

BUNDLE.KEYS Dates, dk

LIST.TOARRAY dk, dts$[]

ARRAY.SORT dts$[]

ARRAY.REVERSE dts$[]

BUNDLE.GET 1, "opt.field\_separator", fs$

reportSubject$ = "Activity log for week ending on " + dts$[1]

reportBody$ = "\"DATE\"" + fs$ + "\"ACTIVITY\"" + fs$ + "\"DURATION\"\n"

dates\_ja$ = "" % sorted array of dates.

daily\_ja$ = "" % hash of dates -> hours.

daydo\_ja$ = "" % hash of dates -> hash of activities -> hours

FOR i = 1 TO 7

IF i > 1 THEN dates\_ja$ += ", "

dates\_ja$ += "'" + dts$[i] + "'"

BUNDLE.GET Dates, dts$[i], DayActivities

BUNDLE.KEYS DayActivities, dk

LIST.SIZE dk, cnt

day\_tot = 0

IF i > 1 THEN daydo\_ja$ += ", "

daydo\_ja$ += "'" + dts$[i] + "':{"

FOR j = 1 TO cnt

LIST.GET dk, j, act\_id$

BUNDLE.GET DayActivities, act\_id$, tmp

BUNDLE.GET Activities, act\_id$, act\_name$

tmp = DurationRound(tmp, interval, method$) % Round as by options.

tmp = ROUND(tmp \* 100) / 100 % Ensure to have at most 2 decimals.

IF j > 1 THEN daydo\_ja$ += ", "

daydo\_ja$ += "'" + act\_name$ + "':" + STR$(tmp)

day\_tot += tmp

reportBody$ += dts$[i] + fs$ + "\"" + act\_name$ + "\"" + fs$ + STR$(tmp) + "\n"

NEXT

daydo\_ja$ += "}"

IF i > 1 THEN daily\_ja$ += ", "

day\_tot = ROUND(day\_tot \* 100) / 100 % Ensure to have at most 2 decimals.

daily\_ja$ += "'" + dts$[i] + "':" + STR$(day\_tot)

NEXT

BUNDLE.PUT 1, "report.subject", reportSubject$

BUNDLE.PUT 1, "report.body", reportBody$

ARRAY.DELETE dts$[]

HTML.LOAD.URL "javascript:doReportData([" + dates\_ja$ + "], {" + daily\_ja$ + "}, {" + daydo\_ja$ + "})"

FN.END

FN.DEF SendWeeklyReport(offset\_week)

! Send email with weekly report.

! Input is ignored.

BUNDLE.GET 1, "opt.default\_email", to$

BUNDLE.GET 1, "report.subject", subject$

BUNDLE.GET 1, "report.body", body$

EMAIL.SEND to$, subject$, body$

FN.END

FN.DEF SendAllData()

! Send all log data via e-mail.

BUNDLE.GET 1, "DB", DB

BUNDLE.CREATE Activities

SQL.QUERY cur, DB, "activity", "\_id, name"

DO

SQL.NEXT eoq, cur, act\_id$, act\_name$

IF !eoq THEN BUNDLE.PUT Activities, act\_id$, act\_name$

UNTIL eoq

body$ = "\"ACTIVITY\"" + fs$ + "\"START\"" + fs$ + "\"END\"" + fs$ + "\"DURATION\"\n"

BUNDLE.GET 1, "opt.field\_separator", fs$

SQL.QUERY cur, DB, "log", "activity, start\_time, end\_time, duration", ""

DO

SQL.NEXT eoq, cur, act\_id$, start$, end$, duration$

IF !eoq & end$ <> "" THEN

TIME VAL(start$), Year$, Month$, Day$, Hour$, Minute$, Second$, WeekDay, isDST

start$ = Year$ + "/" + Month$ + "/" + Day$ + " " + Hour$ + ":" + Minute$ + ":" + Second$

TIME VAL(end$), Year$, Month$, Day$, Hour$, Minute$, Second$, WeekDay, isDST

LET end$ = Year$ + "/" + Month$ + "/" + Day$ + " " + Hour$ + ":" + Minute$ + ":" + Second$

BUNDLE.GET Activities, act\_id$, act\_name$

body$ += "\"" + act\_name$ + "\"" + fs$ + start$ + fs$ + end$ + fs$ + duration$ + "\n"

ENDIF

UNTIL eoq

BUNDLE.GET 1, "opt.default\_email", to$

EMAIL.SEND to$, "Activity log data", body$

FN.END

FN.DEF DeleteAllData()

! Remove all log data.

BUNDLE.GET 1, "DB", DB

SQL.DELETE DB, "log", ""

POPUP "All log data deleted.", 0, 0, 0

FN.END

FN.DEF MergeSelectedActivities(data$)

! Merge the actvities for which the ids are provided in data$.

BUNDLE.GET 1, "DB", DB

SPLIT ids$[], data$, ","

ARRAY.SORT ids$[]

ARRAY.LENGTH count, ids$[]

first$ = ids$[1]

SQL.QUERY cur, DB, "activity", "name", "\_id='" + first$ + "'"

SQL.NEXT eoq, cur, new\_name$

FOR i = 2 TO count

SQL.UPDATE DB, "log", "activity", first$: "activity='" + ids$[i] + "'"

SQL.QUERY cur, DB, "activity", "\_id, name", "\_id='" + ids$[i] + "'"

SQL.NEXT eoq, cur, act\_id$, act\_name$

new\_name$ += "/" + act\_name$

SQL.DELETE DB, "activity", "\_id = '" + ids$[i] + "'"

NEXT

SQL.UPDATE DB, "activity", "name", new\_name$: "\_id='" + first$ + "'"

POPUP "Activities merged.", 0, 0, 0

CALL PushActivityList("mgmt")

FN.END

FN.DEF DeleteSelectedActivities(data$)

! Delete the actvities for which the ids are provided in data$.

BUNDLE.GET 1, "DB", DB

SPLIT ids$[], data$, ","

ARRAY.LENGTH count, ids$[]

FOR i = 1 TO count

SQL.DELETE DB, "log", "activity = '" + ids$[i] + "'"

SQL.DELETE DB, "activity", "\_id = '" + ids$[i] + "'"

NEXT

POPUP "Activities deleted.", 0, 0, 0

CALL PushActivityList("mgmt")

FN.END

FN.DEF PushRunningActivity()

! Check the running activity and push it to html.

BUNDLE.GET 1, "DB", DB

SQL.QUERY cur, DB, "log", "activity, end\_time", "end\_time isnull"

SQL.NEXT eoq, cur, id$, end$

IF eoq THEN

HTML.LOAD.URL "javascript:doUpdateStatus('', '')"

ELSE

HTML.LOAD.URL "javascript:doUpdateStatus('" + id$ + "', '+')"

ENDIF

FN.END

FN.DEF StartStopActivity(data$)

! Stop running activity if any, and starts the new one if any.

! Delete running activity if below threshold.

BUNDLE.GET 1, "DB", DB

t = TIME()

now$ = STR$(t)

SQL.QUERY cur, DB, "log", "\_id, activity, start\_time", "end\_time isnull"

SQL.NEXT eoq, cur, log$, id$, start$

IF !eoq THEN

BUNDLE.GET 1, "opt.record\_threshold", tmp$

threshold = VAL(tmp$)

duration = ROUND((t - VAL(start$)) / 1000)

IF duration < threshold THEN

POPUP "Duration below threshold. Record not saved.", 0, 0, 0

SQL.DELETE DB, "log", "\_id='" + log$ + "'"

ELSE

dur$ = STR$(duration)

SQL.UPDATE DB, "log", "end\_time", now$, "duration", dur$: "\_id='" + log$ + "'"

ENDIF

HTML.LOAD.URL "javascript:doUpdateStatus('" + id$ + "', '-')"

ENDIF

IF data$ <> id$ THEN

SQL.INSERT DB, "log", "activity", data$, "start\_time", now$

HTML.LOAD.URL "javascript:doUpdateStatus('" + data$ + "', '+')"

ENDIF

FN.END

FN.DEF ShowRunningTime(data$)

! Calculate and display the running activity time.

BUNDLE.GET 1, "DB", DB

t = TIME()

now$ = STR$(t)

SQL.QUERY cur, DB, "log", "\_id, activity, start\_time", "end\_time isnull"

SQL.NEXT eoq, cur, log$, id$, start$

duration = 0

IF !eoq THEN

duration = ROUND((t - VAL(start$)) / 1000)

ENDIF

IF duration > 60 THEN

minutes = duration / 60

min = FLOOR(minutes)

sec = ROUND((minutes - min) \* 60)

IF min > 60 THEN

hours = min / 60

h = FLOOR(hours)

min = ROUND((hours - h) \* 60)

tt$ = STR$(h) + FORMAT$(":%#", min) + FORMAT$(":%#", sec)

ELSE

tt$ = "00" + FORMAT$(":%#", min) + FORMAT$(":%#", sec)

ENDIF

ELSE

tt$ = "00:00" + FORMAT$(":%#", ROUND(duration))

ENDIF

POPUP "Current activity running for " + REPLACE$(tt$, ".0", ""), 0, 0, 0

FN.END

FN.DEF AddActivity(data$)

! Add a new activity, and push it to html.

BUNDLE.GET 1, "DB", DB

SQL.INSERT DB, "activity", "name", data$

SQL.QUERY cur, DB, "activity", "\_id, name", "", "\_id DESC LIMIT 1"

SQL.NEXT eoq, cur, id$, name$

HTML.LOAD.URL "javascript:doAddActivity('main', " + id$ + ", '" + name$ + "')"

FN.END

FN.DEF UpdateActivity(data$)

! Updates the name of the selected activity.

! Input is in the form "id\nname".

BUNDLE.GET 1, "DB", DB

SPLIT parts$[], data$, "\n"

SQL.UPDATE DB, "activity", "name", parts$[2]: "\_id='" + parts$[1] + "'"

UNDIM parts$[]

FN.END

FN.DEF UpdateOptions(data$)

! Update options.

! Input is in the form "name1=value1\nname2=value2\n...".

BUNDLE.GET 1, "DB", DB

SPLIT parts$[], data$, "\n"

ARRAY.LENGTH count, parts$[]

FOR i = 1 TO count

eq = IS\_IN("=", parts$[i])

name$ = LEFT$(parts$[i], eq - 1)

value$ = MID$(parts$[i], eq + 1)

SQL.UPDATE DB, "option", "value", value$: "name='" + name$ + "'"

NEXT

UNDIM parts$[]

FN.END

FN.DEF DurationRound(seconds, interval, method$)

! Adjust duration to the interval, by means of the selected method.

! Used at time of reporting on aggregated values.

hours = seconds / 60 / 60

h = FLOOR(hours)

m = (hours - h) \* 60

IF method$ = "ceil" THEN

FN.RTN h + CEIL(m / interval) \* interval / 60

ELSEIF method$ = "floor" THEN

FN.RTN h + FLOOR(m / interval) \* interval / 60

ELSE

FN.RTN h + ROUND(m / interval) \* interval / 60

ENDIF

FN.END

FN.DEF CloseAll()

! Close all open handles.

POPUP "Closing...", 0, 0, 0

TIMER.CLEAR

SOUNDPOOL.RELEASE

HTML.CLOSE

BUNDLE.GET 1, "DB", DB

SQL.CLOSE DB

BUNDLE.GET 1, "isAPK", IS\_APK

IF IS\_APK THEN EXIT

FN.END

RETURN

## ONTIMER:

! Play the sound every given amount of minutes - see StartStopTimer().

BUNDLE.GET G, "sound.beep", snd

SOUNDPOOL.PLAY tmp, snd, 0.99, 0.99, 1, 0, 1

TIMER.RESUME