

```
#include "pebble.h"
```

```
#define NUM_MENU_SECTIONS 20
```

```
#define NUM_MENU_ICONS 3
```

```
#define NUM_FIRST_MENU_ITEMS 3
```

```
#define NUM_SECOND_MENU_ITEMS 3
```

```
#define NUM_THIRD_MENU_ITEMS 3
```

```
#define NUM_FOURTH_MENU_ITEMS 3
```

```
#define NUM_FIFTH_MENU_ITEMS 3
```

```
#define NUM_SIXTH_MENU_ITEMS 3
```

```
#define NUM_SEVENTH_MENU_ITEMS 3
```

```
#define NUM_EIGHTH_MENU_ITEMS 3
```

```
#define NUM_NINTH_MENU_ITEMS 3
```

```
#define NUM_TENTH_MENU_ITEMS 3
```

```
#define NUM_ELEVENTH_MENU_ITEMS 3
```

```
#define NUM_TWELFTH_MENU_ITEMS 3
```

```
#define NUM_THIRTEENTH_MENU_ITEMS 3
```

```
#define NUM_FOURTEENTH_MENU_ITEMS 3
```

```
#define NUM_FIFTEENTH_MENU_ITEMS 3
```

```
#define NUM_SIXTEENTH_MENU_ITEMS 3
```

```
#define NUM_SEVENTEENTH_MENU_ITEMS 3
```

```
#define NUM_EIGHTEENTH_MENU_ITEMS 3
```

```
#define NUM_NINETEENTH_MENU_ITEMS 3
```

```
#define NUM_TWENTIETH_MENU_ITEMS 3
```

```
static Window *window;
```

```
// This is a menu layer
```

```
// You have more control than with a simple menu layer
```

```
static MenuLayer *menu_layer;
```

```
// Menu items can optionally have an icon drawn with them

static GBitmap *menu_icons[NUM_MENU_ICONS];

static int current_icon = 0;

// You can draw arbitrary things in a menu item such as a background

static GBitmap *menu_background;

// A callback is used to specify the amount of sections of menu items

// With this, you can dynamically add and remove sections

static uint16_t menu_get_num_sections_callback(MenuLayer *menu_layer, void *data) {

    return NUM_MENU_SECTIONS;

}

// Each section has a number of items; we use a callback to specify this

// You can also dynamically add and remove items using this

static uint16_t menu_get_num_rows_callback(MenuLayer *menu_layer, uint16_t section_index, void *data) {

    switch (section_index) {

        case 0:

            return NUM_FIRST_MENU_ITEMS;

        case 1:

            return NUM_SECOND_MENU_ITEMS;

        case 2:

            return NUM_THIRD_MENU_ITEMS;

        case 3:

            return NUM_FOURTH_MENU_ITEMS;

        case 4:
```

return NUM_FIFTH_MENU_ITEMS;

case 5:

return NUM_SIXTH_MENU_ITEMS;

case 6:

return NUM_SEVENTH_MENU_ITEMS;

case 7:

return NUM_EIGHTH_MENU_ITEMS;

case 8:

return NUM_NINTH_MENU_ITEMS;

case 9:

return NUM_TENTH_MENU_ITEMS;

case 10:

return NUM_ELEVENTH_MENU_ITEMS;

case 11:

return NUM_TWELFTH_MENU_ITEMS;

case 12:

return NUM_THIRTEENTH_MENU_ITEMS;

case 13:

return NUM_FOURTEENTH_MENU_ITEMS;

case 14:

return NUM_FIFTEENTH_MENU_ITEMS;

case 15:

```
return NUM_SIXTEENTH_MENU_ITEMS;
```

case 16:

```
return NUM_SEVENTEENTH_MENU_ITEMS;
```

case 17:

```
return NUM_EIGHTEENTH_MENU_ITEMS;
```

case 18:

```
return NUM_NINETEENTH_MENU_ITEMS;
```

case 19:

```
return NUM_TWENTIETH_MENU_ITEMS;
```

default:

```
return 0;
```

```
}
```

```
}
```

// A callback is used to specify the height of the section header

```
static int16_t menu_get_header_height_callback(MenuLayer *menu_layer, uint16_t section_index, void *data) {
```

// This is a define provided in pebble.h that you may use for the default height

```
return MENU_CELL_BASIC_HEADER_HEIGHT;
```

```
}
```

// Here we draw what each header is

```
static void menu_draw_header_callback(GContext* ctx, const Layer *cell_layer, uint16_t section_index, void *data) {
```

// Determine which section we're working with

```
switch (section_index) {
```

case 0:

```
// Draw title text in the section header
```

```
menu_cell_basic_header_draw(ctx, cell_layer, "Breakfast");
```

```
break;
```

case 1:

```
menu_cell_basic_header_draw(ctx, cell_layer, "Barbecue");
```

```
break;
```

case 2:

```
menu_cell_basic_header_draw(ctx, cell_layer, "Buffet");
```

```
break;
```

case 3:

```
menu_cell_basic_header_draw(ctx, cell_layer, "Burger Place");
```

```
break;
```

case 4:

```
menu_cell_basic_header_draw(ctx, cell_layer, "Chicken Wings");
```

```
break;
```

case 5:

```
menu_cell_basic_header_draw(ctx, cell_layer, "Chinese Food");
```

```
break;
```

case 6:

```
menu_cell_basic_header_draw(ctx, cell_layer, "Fast Food");
```

```
break;
```

case 7:

```
menu_cell_basic_header_draw(ctx, cell_layer, "French Food");
```

```
break;
```

```
case 8:
```

```
menu_cell_basic_header_draw(ctx, cell_layer, "Indian Food");
```

```
break;
```

```
case 9:
```

```
menu_cell_basic_header_draw(ctx, cell_layer, "Italian Food");
```

```
break;
```

```
case 10:
```

```
menu_cell_basic_header_draw(ctx, cell_layer, "Kosher");
```

```
break;
```

```
case 11:
```

```
menu_cell_basic_header_draw(ctx, cell_layer, "Japanese");
```

```
break;
```

```
case 12:
```

```
menu_cell_basic_header_draw(ctx, cell_layer, "Mediterranean Food");
```

```
break;
```

```
case 13:
```

```
menu_cell_basic_header_draw(ctx, cell_layer, "Mexican Food");
```

```
break;
```

```
case 14:
```

```
menu_cell_basic_header_draw(ctx, cell_layer, "Pizza Place");
```

```
break;
```

```
case 15:
```

```

    menu_cell_basic_header_draw(ctx, cell_layer, "Steak House");

    break;

case 16:

    menu_cell_basic_header_draw(ctx, cell_layer, "Seafood");

    break;

case 17:

    menu_cell_basic_header_draw(ctx, cell_layer, "Sushi");

    break;

case 18:

    menu_cell_basic_header_draw(ctx, cell_layer, "Sandwich Shop");

    break;

case 19:

    menu_cell_basic_header_draw(ctx, cell_layer, "Thai");

    break;

}

}

// This is the menu item draw callback where you specify what each item should look like

static void menu_draw_row_callback(GContext* ctx, const Layer *cell_layer, MenuItem *cell_index, void *data) {

    // Determine which section we're going to draw in

    switch (cell_index->section) {

    case 0:

        // Use the row to specify which item we'll draw

        switch (cell_index->row) {

        case 0:

            // This is a basic menu item with a title and subtitle

```

```
menu_cell_basic_draw(ctx, cell_layer, "The Breakfast Klub", "(713)528-8561", NULL);
```

```
break;
```

```
case 1:
```

```
menu_cell_basic_draw(ctx, cell_layer, "HOP Resturant", "(713)661-9795", NULL);
```

```
break;
```

```
case 2:
```

```
menu_cell_basic_draw(ctx, cell_layer, "Waffle House", "(281)933-8633", NULL);
```

```
break;
```

```
}
```

```
break;
```

```
case 1:
```

```
switch (cell_index->row) {
```

```
case 0:
```

```
menu_cell_basic_draw(ctx, cell_layer, "Fainmous BBQ", "(713)728-9663", NULL);
```

```
break;
```

```
case 1:
```

```
menu_cell_basic_draw(ctx, cell_layer, "Pappas Bar-B-Q", "(713)777-1661", NULL);
```

```
break;
```

```
case 2:
```

```
menu_cell_basic_draw(ctx, cell_layer, "Old Hickory Inn Barbecue", "(713)723-8908", NULL);
```

```
break;
```

```
}
```

```
break;
```

```
case 2:
```

```
switch (cell_index->row) {
```



```
case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "Silver Palace Chinese Buffet", "(713)661-1963", NULL);

break;

case 1:

menu_cell_basic_draw(ctx, cell_layer, "Lambo Chinese Buffet", "(713)783-6838", NULL);

break;

case 2:

menu_cell_basic_draw(ctx, cell_layer, "Golden Corral", "(713)839-1700", NULL);

break;

}

break;

case 3:

switch (cell_index->row) {

case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "Champ-Burger", "(713)227-2094", NULL);

break;

case 1:

menu_cell_basic_draw(ctx, cell_layer, "Tornado Burger", "(281)403-3278", NULL);

break;

case 2:

menu_cell_basic_draw(ctx, cell_layer, "Annie's Hamburgers", "(713)729-9861", NULL);

break;

}

}
```

```
break;

case 4:

switch (cell_index->row) {

case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "Wings-N-Things", "(713)974-7921", NULL);

break;

case 1:

menu_cell_basic_draw(ctx, cell_layer, "Wingstop", "(713)551-9464", NULL);

break;

case 2:

menu_cell_basic_draw(ctx, cell_layer, "Buffalo Wild Wings", "(713)521-1100", NULL);

break;

}

break;

case 5:

switch (cell_index->row) {

case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "Hunan Hut", "(713)729-9443", NULL);

break;

case 1:

menu_cell_basic_draw(ctx, cell_layer, "P.F. Chang's China Bistro", "(281)920-3553", NULL);

break;

case 2:
```

```
menu_cell_basic_draw(ctx, cell_layer, "Panda Express", "(713)334-7697", NULL);

break;

}

break;

case 6:

switch (cell_index->row) {

case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "What-A-Burger", "(713)729-8025", NULL);

break;

case 1:

menu_cell_basic_draw(ctx, cell_layer, "Burger King", "(713)988-2570", NULL);

break;

case 2:

menu_cell_basic_draw(ctx, cell_layer, "McDonald's", "(713)721-4925", NULL);

break;

}

break;

case 7:

switch (cell_index->row) {

case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "La Madeleine Country French Café", "(713)218-8075", NULL);

break;

case 1:
```

```
menu_cell_basic_draw(ctx, cell_layer, "Artisans Resturants", "(713)529-9111", NULL);

break;

case 2:

menu_cell_basic_draw(ctx, cell_layer, "Brasserie Max & Julie", "(713)524-0070", NULL);

break;

}

break;

case 8:

switch (cell_index->row) {

case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "Neeta's Indian Cuisine", "(832)251-7200", NULL);

break;

case 1:

menu_cell_basic_draw(ctx, cell_layer, "Maharaja Bhog", "(713)771-2464", NULL);

break;

case 2:

menu_cell_basic_draw(ctx, cell_layer, "Shiva Indian Resturant", "(713)523-4753", NULL);

break;

}

break;

case 9:

switch (cell_index->row) {

case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "Napoli Italian Resturant", "(713)726-1166", NULL);
```

```
break;
```

```
case 1:
```

```
menu_cell_basic_draw(ctx, cell_layer, "Guglianis", "(713)349-9040", NULL);
```

```
break;
```

```
case 2:
```

```
menu_cell_basic_draw(ctx, cell_layer, "Olive Garden", "(713)774-0198", NULL);
```

```
break;
```

```
}
```

```
break;
```

```
case 10:
```

```
switch (cell_index->row) {
```

```
case 0:
```

```
// There is title draw for something more simple than a basic menu item
```

```
menu_cell_basic_draw(ctx, cell_layer, "Saba's Restaurant", "(713)270-7222", NULL);
```

```
break;
```

```
case 1:
```

```
menu_cell_basic_draw(ctx, cell_layer, "My Pita", "(713)283-9200", NULL);
```

```
break;
```

```
case 2:
```

```
menu_cell_basic_draw(ctx, cell_layer, "Aroma Pizza Cafe", "(832)460-0194", NULL);
```

```
break;
```

```
}
```

```
break;
```

```
case 11:
```

```
switch (cell_index->row) {
```

case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "Oishii Restaurant", "(713)621-8628", NULL);

break;

case 1:

menu_cell_basic_draw(ctx, cell_layer, "Kaneyama Japanese Restaurant", "(713)784-5168", NULL);

break;

case 2:

menu_cell_basic_draw(ctx, cell_layer, "Benihana Downtown Houston", "(713)659-8231", NULL);

break;

}

break;

case 12:

switch (cell_index->row) {

case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "Fadi's Meyerland Mediterranean Grill", "(713)666-4644", NULL);

break;

case 1:

menu_cell_basic_draw(ctx, cell_layer, "The Mediterranean Grill", "(713)651-1481", NULL);

break;

case 2:

menu_cell_basic_draw(ctx, cell_layer, "Aladdin Mediterranean Cuisine", "(713)942-2321", NULL);

break;

}

```
break;

case 13:

switch (cell_index->row) {

case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "Los Tios Mexican Resturant", "(713)184-0380", NULL);

break;

case 1:

menu_cell_basic_draw(ctx, cell_layer, "Lupe Tortilla Mexican Resturant", "(713)522-4420", NULL);

break;

case 2:

menu_cell_basic_draw(ctx, cell_layer, "El Rancho", "(713)283-1388", NULL);

break;

}

break;

case 14:

switch (cell_index->row) {

case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "Russo's New York Pizzeria", "(713)349-8787", NULL);

break;

case 1:

menu_cell_basic_draw(ctx, cell_layer, "Angelos Pizza", "(713)665-7400", NULL);

break;

case 2:

menu_cell_basic_draw(ctx, cell_layer, "Barry's Pizza and Italian Diner", "(713)266-8692", NULL);
```

```
break;

}

break;

case 15:

switch (cell_index->row) {

case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "Pappas Bros. Steakhouse", "(713)780-7352", NULL);

break;

case 1:

menu_cell_basic_draw(ctx, cell_layer, "Saltgrass Steakhouse", "(713)665-2226", NULL);

break;

case 2:

menu_cell_basic_draw(ctx, cell_layer, "Outback Steakhouse", "(713)218-0760", NULL);

break;

}

break;

case 16:

switch (cell_index->row) {

case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "Calliope's", "(713)773-2099", NULL);

break;

case 1:

menu_cell_basic_draw(ctx, cell_layer, "El Pacifico", "(713)218-0700", NULL);

break;
```


case 2:

```
menu_cell_basic_draw(ctx, cell_layer, "Mambo Seafood", "(713)541-3666", NULL);
```

```
break;
```

```
}
```

```
break;
```

case 17:

```
switch (cell_index->row) {
```

case 0:

```
// There is title draw for something more simple than a basic menu item
```

```
menu_cell_basic_draw(ctx, cell_layer, "Samurai Japanese Steak & Sushi", "(713)432-1858", NULL);
```

```
break;
```

case 1:

```
menu_cell_basic_draw(ctx, cell_layer, "Uptown Sushi", "(713)871-1200", NULL);
```

```
break;
```

case 2:

```
menu_cell_basic_draw(ctx, cell_layer, "Kubo's Sushi Bar & Grill", "(713)528-7878", NULL);
```

```
break;
```

```
}
```

```
break;
```

case 18:

```
switch (cell_index->row) {
```

case 0:

```
// There is title draw for something more simple than a basic menu item
```

```
menu_cell_basic_draw(ctx, cell_layer, "Potbelly Sandwich Shop", "(713)751-0032", NULL);
```

```
break;
```

```
case 1:

menu_cell_basic_draw(ctx, cell_layer, "Jimmy John's Gourmet Sandwich", "(713)222-9995", NULL);

break;

case 2:

menu_cell_basic_draw(ctx, cell_layer, "Subway", "(713)777-744", NULL);

break;

}

break;

case 19:

switch (cell_index->row) {

case 0:

// There is title draw for something more simple than a basic menu item

menu_cell_basic_draw(ctx, cell_layer, "Thai Cottage", "(713)838-0707", NULL);

break;

case 1:

menu_cell_basic_draw(ctx, cell_layer, "Thai Spice Express", "(713)777-4888", NULL);

break;

case 2:

menu_cell_basic_draw(ctx, cell_layer, "Nidda Thai Cuisine", "(713)522-8895", NULL);

break;

}

}

}

// Here we capture when a user selects a menu item

void menu_select_callback(MenuLayer *menu_layer, MenuItem *cell_index, void *data) {
```

```

// Use the row to specify which item will receive the select action

switch (cell_index->row) {

    // This is the menu item with the cycling icon

    case 1:

        // Cycle the icon

        current_icon = (current_icon + 1) % NUM_MENU_ICONS;

        // After changing the icon, mark the layer to have it updated

        layer_mark_dirty(menu_layer_get_layer(menu_layer));

        break;

    }

}

// This initializes the menu upon window load

void window_load(Window *window) {

    // Here we load the bitmap assets

    // resource_init_current_app must be called before all asset loading

    int num_menu_icons = 0;

    menu_icons[num_menu_icons++] = gbitmap_create_with_resource(RESOURCE_ID_IMAGE_MENU_ICON_BIG_WATCH);

    menu_icons[num_menu_icons++] = gbitmap_create_with_resource(RESOURCE_ID_IMAGE_MENU_ICON_SECTOR_WATCH);

    menu_icons[num_menu_icons++] = gbitmap_create_with_resource(RESOURCE_ID_IMAGE_MENU_ICON_BINARY_WATCH);

    // And also load the background

    menu_background = gbitmap_create_with_resource(RESOURCE_ID_IMAGE_BACKGROUND_BRAINS);

    // Now we prepare to initialize the menu layer

    // We need the bounds to specify the menu layer's viewport size

    // In this case, it'll be the same as the window's

    Layer *window_layer = window_get_root_layer(window);

    GRect bounds = layer_get_frame(window_layer);

```

```
// Create the menu layer

menu_layer = menu_layer_create(bounds);

// Set all the callbacks for the menu layer

menu_layer_set_callbacks(menu_layer, NULL, (MenuLayerCallbacks){

    .get_num_sections = menu_get_num_sections_callback,

    .get_num_rows = menu_get_num_rows_callback,

    .get_header_height = menu_get_header_height_callback,

    .draw_header = menu_draw_header_callback,

    .draw_row = menu_draw_row_callback,

    .select_click = menu_select_callback,

});

// Bind the menu layer's click config provider to the window for interactivity

menu_layer_set_click_config_onto_window(menu_layer, window);

// Add it to the window for display

layer_add_child(window_layer, menu_layer_get_layer(menu_layer));

}

void window_unload(Window *window) {

    // Destroy the menu layer

    menu_layer_destroy(menu_layer);

    // Cleanup the menu icons

    for (int i = 0; i < NUM_MENU_ICONS; i++) {

        gbitmap_destroy(menu_icons[i]);

    }

    // And cleanup the background

    gbitmap_destroy(menu_background);
```

```
}
```

```
int main(void) {
```

```
    window = window_create();
```

```
    // Setup the window handlers
```

```
    window_set_window_handlers(window, (WindowHandlers) {
```

```
        .load = window_load,
```

```
        .unload = window_unload,
```

```
    });
```

```
    window_stack_push(window, true /* Animated */);
```

```
    app_event_loop();
```

```
    window_destroy(window);
```

```
}
```