

Факультатив ФКН

РАЗРАБОТКА МОБИЛЬНЫХ ПРИЛОЖЕНИЙ НА БАЗЕ ПЛАТФОРМЫ



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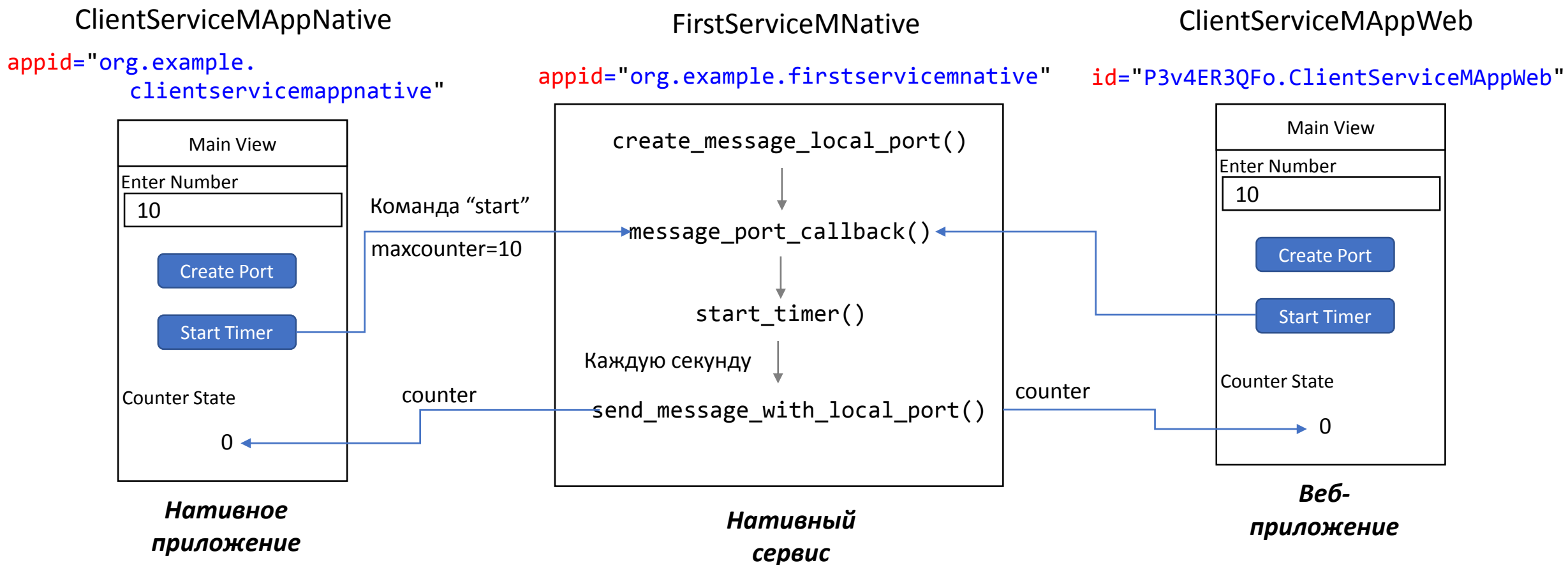
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Нативный сервис и веб-приложение



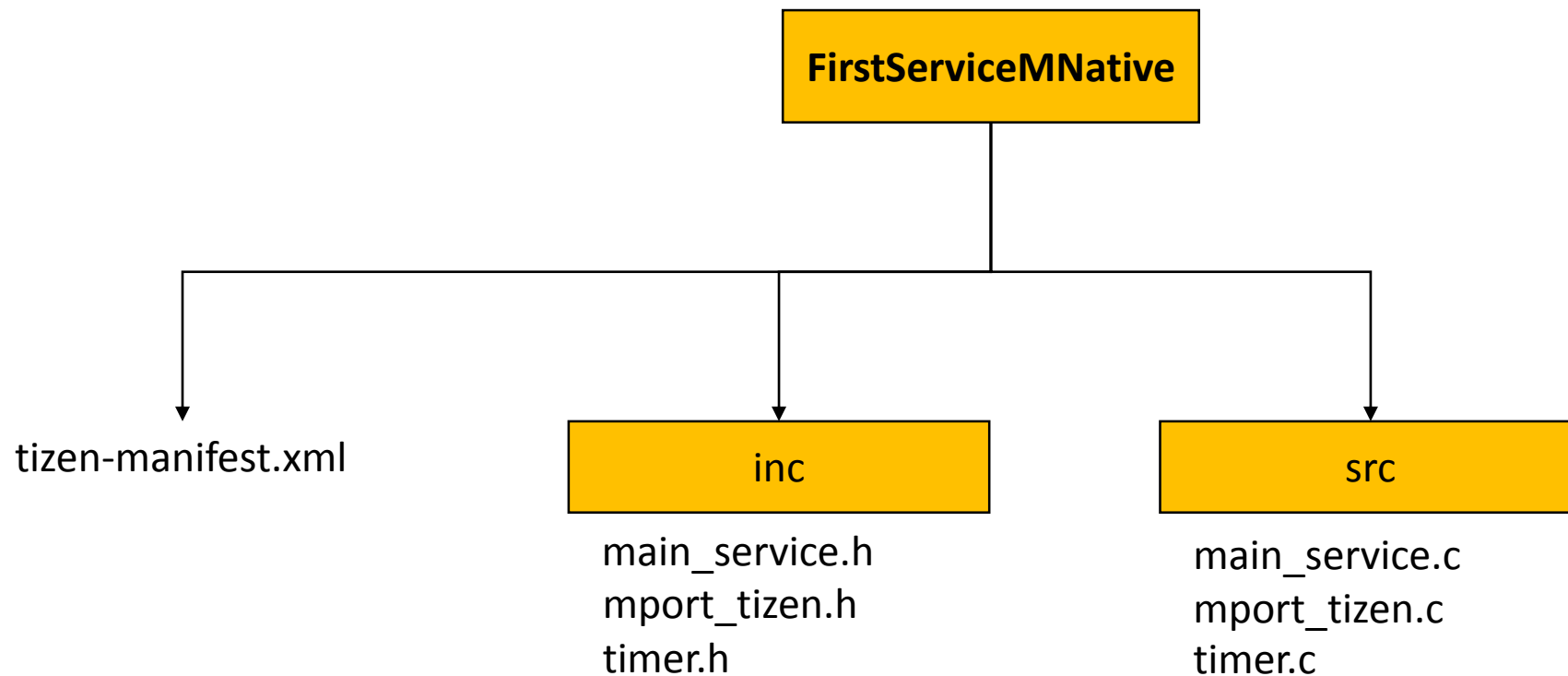
Описание работы приложений



Коммуникация: **MessagePort API**



Структура приложения FirstServiceMNative





FirstServiceMNative – Заголовки

mport_tizen.h

```
void create_message_local_port();

void message_port_callback(int local_port_id,
                           const char *remote_app_id,
                           const char *remote_port,
                           bool trusted_remote_port,
                           bundle *message,
                           void *user_data);

void send_message_with_local_port(int local_port_id,
                                  char *remote_app_id,
                                  char *remote_port_name,
                                  int counter,
                                  int isFinished);

void start_timer(int counter, int local_port_id, char *remote_app_id, char *remote_port_name);
```

timer.h

```
void one_second_timer();
```



FirstServiceMNative – Создание локального порта MessagePort

mport_tizen.c

```
void create_message_local_port()
```

```
    char *local_port_name = "ServiceLocalPort";
```

```
    int local_port_id = message_port_register_local_port(local_port_name, message_port_callback, NULL);
```

```
void message_port_callback(int local_port_id, const char *remote_app_id, const char *remote_port,  
                           bool trusted_remote_port, bundle *message, void *user_data)
```

```
    char *command = NULL;
```

```
    char *str_counter = NULL;
```

```
    bundle_get_str(message, "command", &command);
```

```
    bundle_get_str(message, "maxcounter", &str_counter);
```



FirstServiceMNative – Создание локального порта MessagePort

mport_tizen.c

```
void message_port_callback(int local_port_id, const char *remote_app_id, const char *remote_port,
                           bool trusted_remote_port, bundle *message, void *user_data)

char *command = NULL;
char *str_counter = NULL;

bundle_get_str(message, "command", &command);
bundle_get_str(message, "maxcounter", &str_counter);

if (strcmp(command, "start") == 0) {
    bundle *reply = bundle_create();

    bundle_add_str(reply, "status", "starting");
    bundle_add_str(reply, "counter", "0");

    ret = message_port_send_message(remote_app_id, remote_port, reply);

    bundle_free(reply);

    int counter;
    sscanf(str_counter, "%i", &counter);

    start_timer(counter, local_port_id, remote_app_id, remote_port);
}
```



```
void start_timer(int counter, int local_port_id, char *remote_app_id, char *remote_port_name)
{
    int i = 0;

    for(i; i < counter; i++)
    {
        one_second_timer();
        send_message_with_local_port(local_port_id, remote_app_id, remote_port_name, i+1, 0);
    }

    send_message_with_local_port(local_port_id, remote_app_id, remote_port_name, i+1, 1);
}
```




FirstServiceMNative – Отправка сообщений

mport_tizen.c

```
void send_message_with_local_port(int local_port_id, char *remote_app_id, char *remote_port_name,
                                   int counter, int isFinished)

    bundle *b = bundle_create();

    if (isFinished == 1) {
        bundle_add_str(b, "status", "finished");
        bundle_add_str(b, "counter", "-1");
    }
    else
    {
        char str_counter[64];

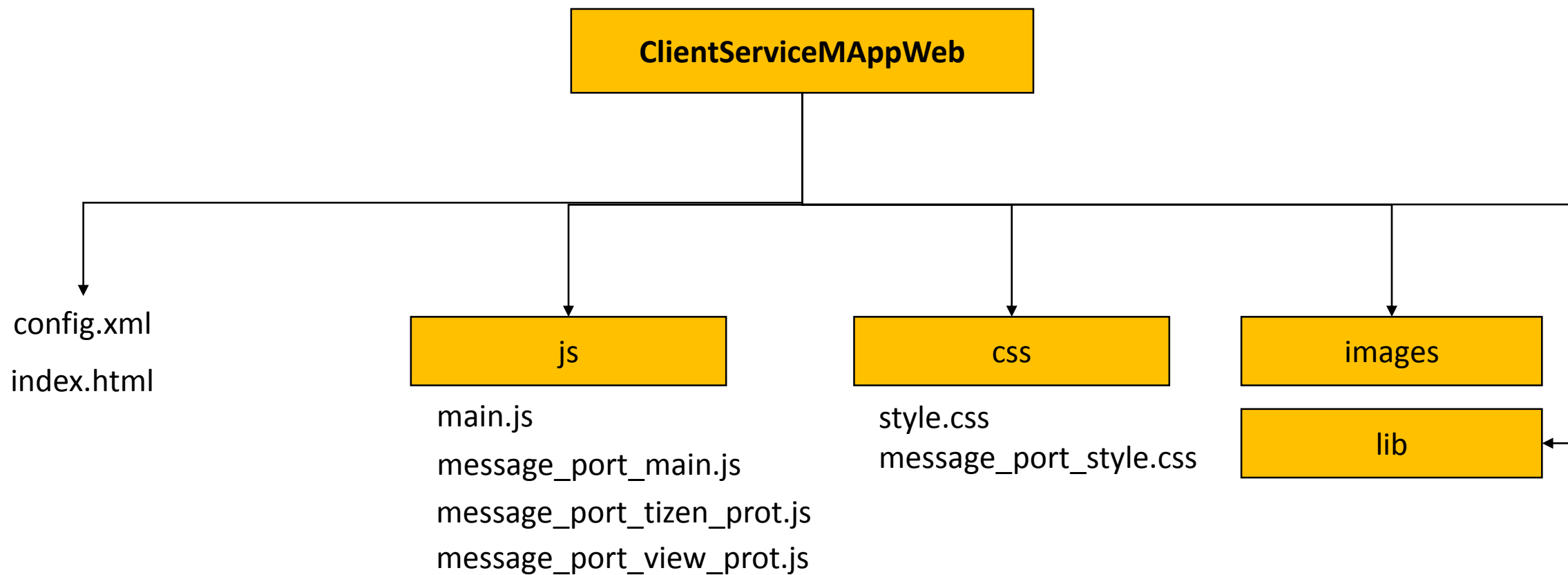
        sprintf(str_counter, "%d", counter);

        bundle_add_str(b, "status", "active");
        bundle_add_str(b, "counter", str_counter);
    }

    ret = message_port_send_message_with_local_port(remote_app_id, remote_port_name, b, local_port_id);
```



Структура приложения ClientServiceMAppWeb





- ```
this.localPort = tizen.messageport.requestLocalMessagePort(this.localPortName);

var localPortWatchId = this.localPort.addMessagePortListener(onsuccessRecieveEvent);

function onsuccessRecieveEvent(data, replyPort)
{
 callbackView(data);
}
```

- [illegible]



# ClientServiceMAppWeb – Отправка сообщений

---

```
sendMessage : function(command, message) {
 if (this.remotePort != null) {
 var messageData = [{ key: "command", value: command},
 { key: "maxcounter", value: message}];
 this.remotePort.sendMessage(messageData, this.localPort);
 }
}
```



# Ссылки

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## \* Message Port:

<https://developer.tizen.org/development/guides/web-application/application-management/application-data-exchange/message-port>

[https://developer.tizen.org/dev-guide/latest/org.tizen.web.apireference/html/device\\_api/mobile/tizen/messageport.html](https://developer.tizen.org/dev-guide/latest/org.tizen.web.apireference/html/device_api/mobile/tizen/messageport.html)

## \* Icons:

<http://www.flaticon.com/>