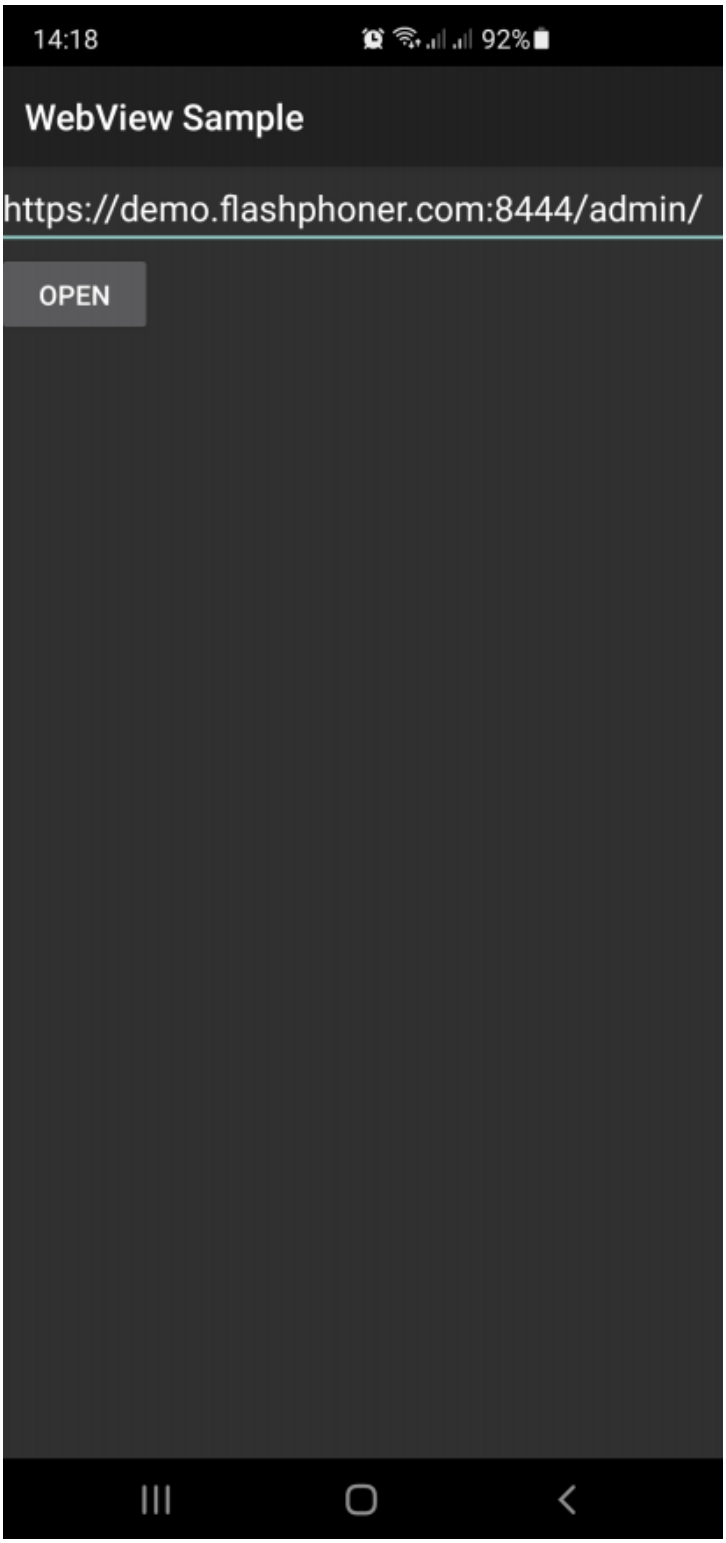
Android Webview

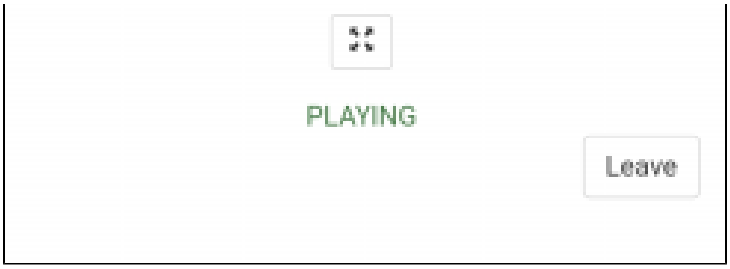
Android WebView application example

This example can be used to open anyWeb SDK example page like in a bowser.To open the page, the URL should be set



MCU Client example opened in Android Webview in audio only conference mode looks as follows


14:22
91%
MCU Client
Before use: please set the server parameters as described here
Conference
WCS URL
wss://demo.flashphoner.com:8443
Login
user1
Room
room1
Volume
Audio
Full Screen



Analyzing the code

To analyze the code takeMainActivity.javaandWebViewActivity.javaclasses of the webview-example application, which is available in build1.1.0.26.

1. Launch WebViewActivity with URL entered

code

```
button = (Button) findViewById(R.id.btnUrl);
button.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        EditText et = (EditText) findViewById(R.id.textUrl);
        String url = et.getText().toString();
        if (url.isEmpty()) {
            showDialog();
        } else {
            Intent intent = new Intent(context, WebViewActivity.class);
            intent.putExtra("url", url);
            startActivity(intent);
        }
    }
});
```

2. WebView settings configuration

code

```
WebSettings settings = webView.getSettings();

// Enable Javascript
settings.setJavaScriptEnabled(true);

// Use WideViewport and Zoom out if there is no viewport defined
settings.setUseWideViewPort(true);
settings.setLoadWithOverviewMode(true);

// Enable pinch to zoom without the zoom buttons
settings.setBuiltInZoomControls(true);

// Allow use of Local Storage
settings.setDomStorageEnabled(true);

if(Build.VERSION.SDK_INT > Build.VERSION_CODES.HONEYCOMB) {
    // Hide the zoom controls for HONEYCOMB+
    settings.setDisplayZoomControls(false);
}

// Enable remote debugging via chrome://inspect
if(Build.VERSION.SDK_INT >= Build.VERSION_CODES.KITKAT) {
    WebView.setWebContentsDebuggingEnabled(true);
}
```

3. SSL certificates error handler configuration

code

```
        webView.setWebViewClient(new WebViewClient() {
            @Override
            public void onReceivedSslError(WebView view, final SslErrorHandler handler, SslError error) {

                final AlertDialog.Builder builder = new AlertDialog.Builder(view.getContext());
                String message = "SSL Certificate error.";
                switch (error.getPrimaryError()) {
                    case SslError.SSL_UNTRUSTED:
                        message = "The certificate authority is not trusted";
                        break;
                    case SslError.SSL_EXPIRED:
                        message = "The certificate has expired";
                        break;
                    case SslError.SSL_NOTYETVALID:
                        message = "The certificate is not yet valid.";
                        break;
                    case SslError.SSL_IDMISMATCH:
                        message = "The cerificate ID is mismatch";
                        break;
                    case SslError.SSL_DATE_INVALID:
                        message = "The certificate date is invalid";
                        break;
                    case SslError.SSL_INVALID:
                        message = "The certificate is invalid";
                        break;
                }
                builder.setTitle("SSL Cerificate Error");
                builder.setMessage(message);
                builder.setPositiveButton("Continue", new DialogInterface.OnClickListener() {
                    @Override
                    public void onClick(DialogInterface dialogInterface, int i) {
                        handler.proceed();
                    }
                });
                builder.setNegativeButton("Cancel", new DialogInterface.OnClickListener() {
                    @Override
                    public void onClick(DialogInterface dialogInterface, int i) {
                        handler.cancel();
                    }
                });
                Log.d(TAG, "onReceivedSslError " + message);
                final AlertDialog dialog = builder.create();
                dialog.show();
            }
        });
    }
```

4. Camera and microphone access requesting handler configuration

code

```
webView.setWebChromeClient(new WebChromeClient() {
    @Override
    public void onPermissionRequest(final PermissionRequest request) {
        Log.d(TAG, "Request permissions: ");
        for (String res : request.getResources()) {
            Log.d(TAG, res);
        }
        WebViewActivity.this.runOnUiThread(new Runnable() {
            @TargetApi(Build.VERSION_CODES.LOLLIPOP)
            @Override
            public void run() {
                request.grant(request.getResources());
            }
        });
    }

    @Override
    public void onPermissionRequestCanceled(PermissionRequest request) {
        Log.d(TAG, "onPermissionRequestCanceled");
    }

});
```

5. Requesting camera and microphone access on activity start

code

```
if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.M) {
    int hasCameraPermission = checkSelfPermission(Manifest.permission.CAMERA);
    int hasRecordPermission = checkSelfPermission(Manifest.permission.RECORD_AUDIO);
    List<String> permissions = new ArrayList<>();
    if (hasCameraPermission != PackageManager.PERMISSION_GRANTED) {
        permissions.add(Manifest.permission.CAMERA);
    }
    if (hasRecordPermission != PackageManager.PERMISSION_GRANTED) {
        permissions.add(Manifest.permission.RECORD_AUDIO);
    }
    if (!permissions.isEmpty()) {
        requestPermissions(permissions.toArray(new String[permissions.size()]), 111);
    }
}
```

6. URL opening

code

```
webView.loadUrl(url);
```