

Accessing Native Features of the Device



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Overview



Accessing native device features

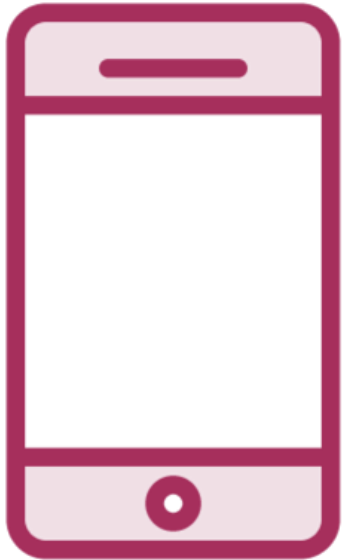
Working with maps

Sending an email



Accessing Native Device Features





Native Android Features

- Code manually
- Use Xamarin.Essentials abstractions



Native Android Features

Camera

Maps

Sensors

Battery

Flashlight

Email



Working with Maps



Working with Maps



Maps app



Map API and Views



Overlays on the maps





Maps App

- Intent
- Data is geolocation
- Optionally pass zoom level, address...
- Street View

Demo



Forwarding to the Maps app





Google Maps API

- Map inside app
- Users can interact with map
- Add overlays and markers
- Google Play Services required



Required permissions

Google Maps API key also required

NuGet package



Adding a Google Map

GoogleMap class

MapFragment

MapView



Demo



Adding a Google Map to the application



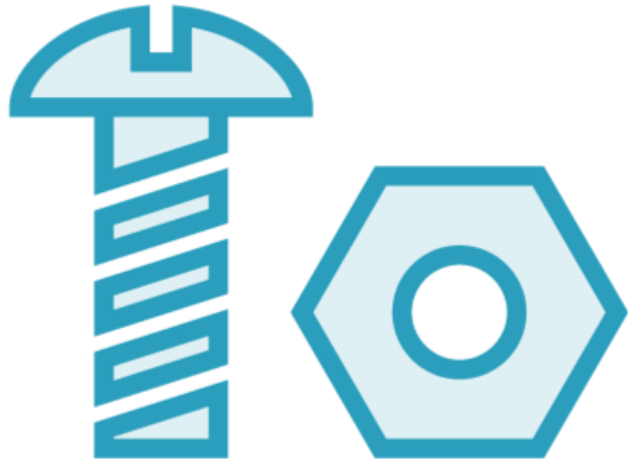
Sending an Email





Xamarin.Essentials

- Abstraction over native features
- Works with Android, iOS and Forms
- NuGet package, added by default



Xamarin.Essentials includes

- Clipboard
- Email
- Sensors (compass, shake...)
- Battery
- Geolocation and maps
- Phone and SMS
- Secure storage
- Flashlight
- ...

Demo



Using Xamarin.Essentials for email



Summary



Xamarin.Android gives access to all native features

Manual approach always works

Xamarin.Essentials can reduce work



Up next:
Deploying the application to the
store

