

# Maps - Markers

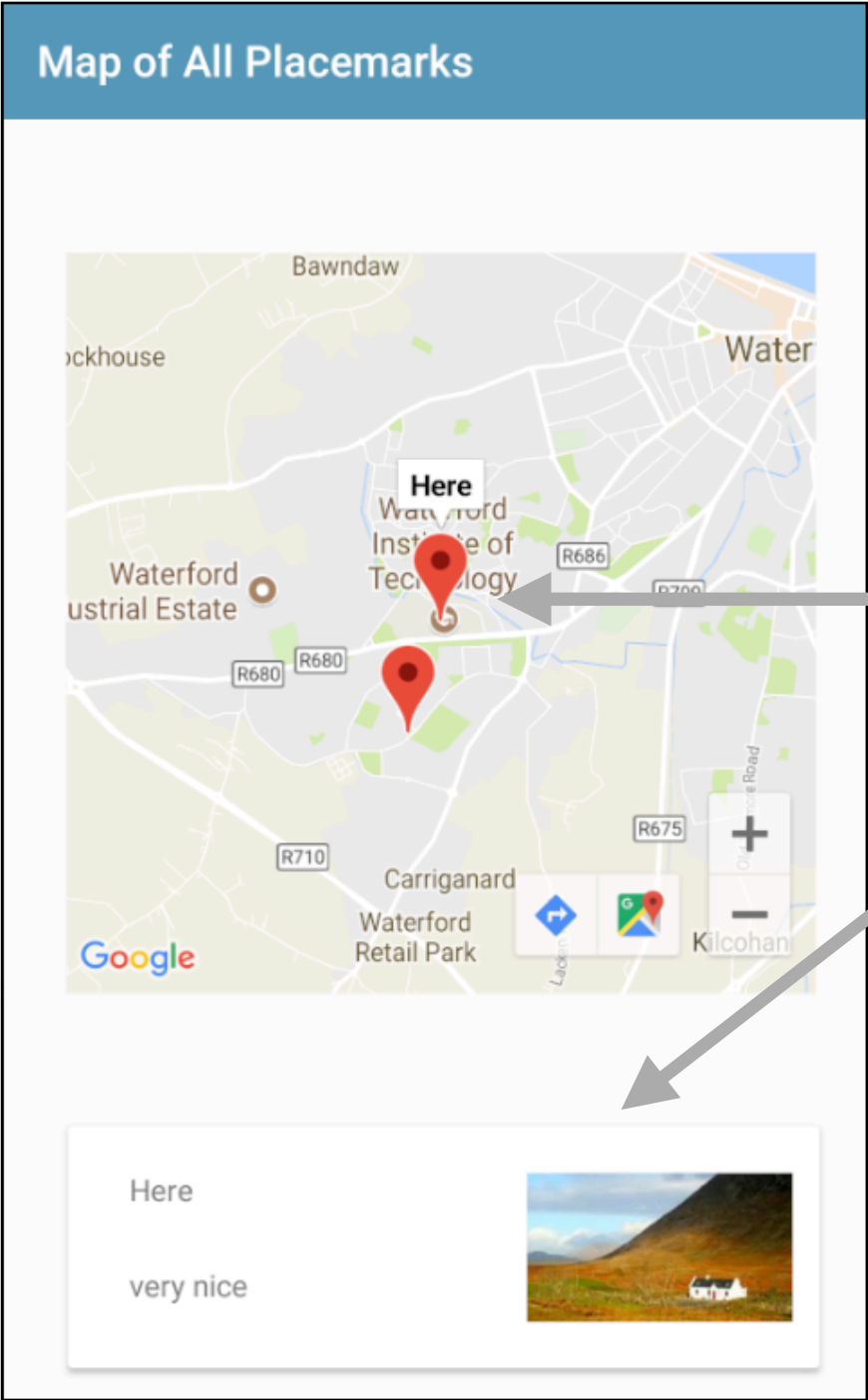
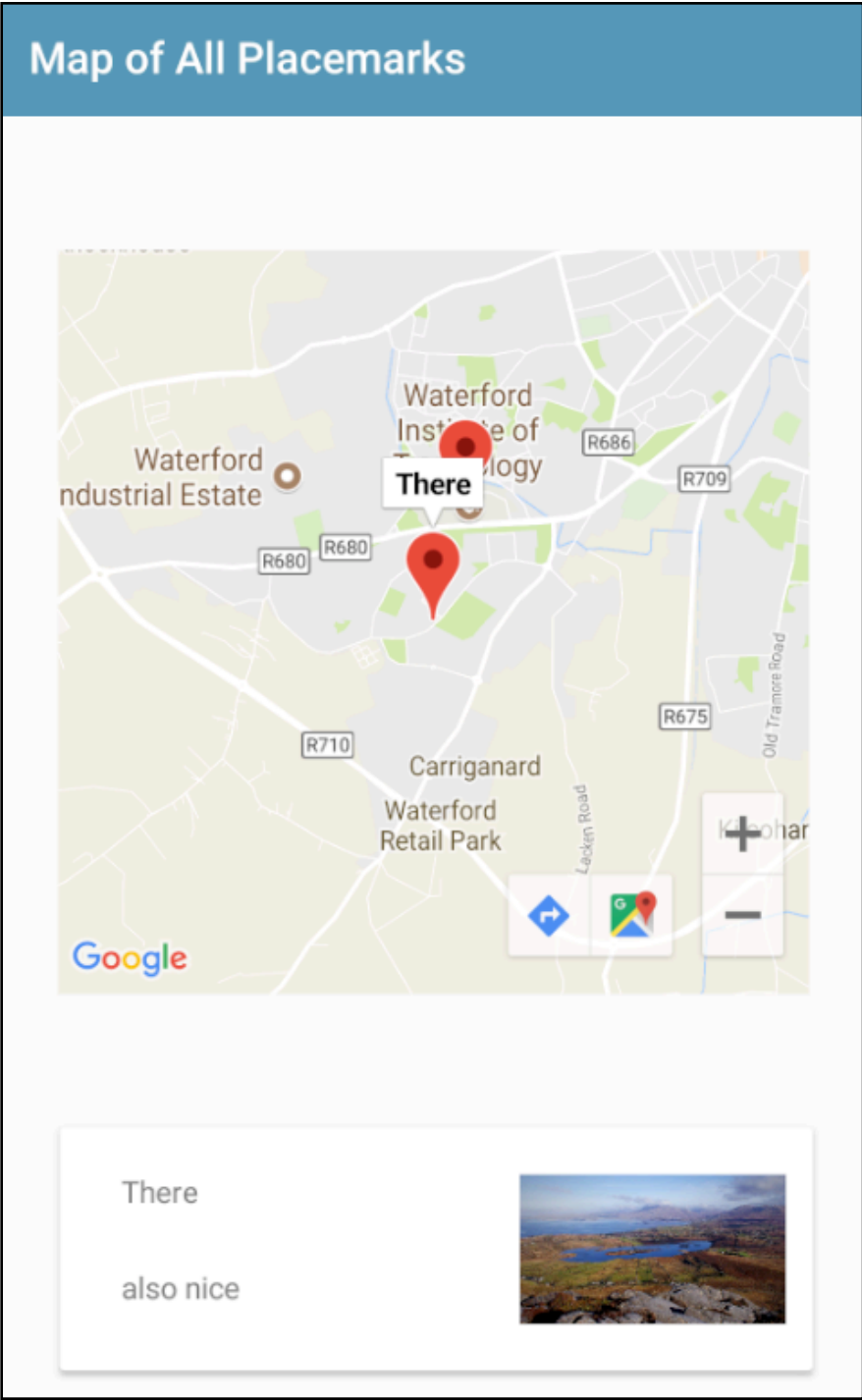
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## Lab-09



Support placemark details by clicking on marker + set current location as starting point for creating a Placemark.

# PlacemarkMapsActivity




Select  
placemark...

dynamically  
updates card  
details

## PlacemarkStore - findById

```
interface PlacemarkStore {  
    suspend fun findAll(): List<PlacemarkModel>  
    suspend fun findById(id:Long) : PlacemarkModel?  
    fun create(placemark: PlacemarkModel)  
    fun update(placemark: PlacemarkModel)  
    fun delete(placemark: PlacemarkModel)  
}
```

new method to  
search for  
placemaker by id



## PlacemarkDao- findById

```
@Dao
interface PlacemarkDao {

    @Insert(onConflict = OnConflictStrategy.REPLACE)
    fun create(placemark: PlacemarkModel)


    @Query("SELECT * FROM PlacemarkModel")
    fun findAll(): List<PlacemarkModel>

    @Query("select * from PlacemarkModel where id = :id")
    fun findById(id: Long): PlacemarkModel

    @Update
    fun update(placemark: PlacemarkModel)

    @Delete
    fun deletePlacemark(placemark: PlacemarkModel)
}
```

new method to  
search for  
placemaker by id



# PlacemarkStoreRoom

```
class PlacemarkStoreRoom(val context: Context) : PlacemarkStore {  
  
    var dao: PlacemarkDao  
  
    ...  
  
    override suspend fun findById(id: Long): PlacemarkModel? {  
        val deferredPlacemark = bg {  
            dao.findById(id)  
        }  
        val placemark = deferredPlacemark.await()  
        return placemark  
    }  
}
```

new method to  
search for  
placemaker by id

# PlacemarkMapsActivity

```
fun configureMap() {
    map.uiSettings.setZoomControlsEnabled(true)
    map.setOnMarkerClickListener(this)
    async(UI) {
        app.placemarks.findAll().forEach {
            val loc = LatLng(it.lat, it.lng)
            val options = MarkerOptions().title(it.title).position(loc)
            map.addMarker(options).tag = it.id
            map.moveCamera(CameraUpdateFactory.newLatLngZoom(loc, it.zoom))
        }
    }
}

override fun onMarkerClick(marker: Marker): Boolean {
    async(UI) {
        val tag = marker.tag as Long
        val placemark = app.placemarks.findById(tag)
        currentTitle.text = placemark!!.title
        currentDescription.text = placemark!!.description
        imageView.setImageBitmap(readImageFromPath(this@PlacemarkMapsActivity, placemark.image))
    }
    return false
}
```

## Map of All Placemarks



There

also nice



# PlacemarkMapsActivity

```
fun configureMap() {  
    map.uiSettings.setZoomControlsEnabled(true)  
    map.setOnMarkerClickListener(this)  
    async(UI) {  
        app.placemarks.findAll().forEach {  
            val loc = LatLng(it.lat, it.lng)  
            val options = MarkerOptions().title(it.title).position(loc)  
            map.addMarker(options).tag = it.id  
            map.moveCamera(CameraUpdateFactory.newLatLngZoom(loc, it.zoom))  
        }  
    }  
}
```

Map of All Placemarks



There

also nice



Add all placemarks to map  
As each placemark is added - include its **ID** as a **TAG**

```
map.addMarker(options).tag = it.id
```

# PlacemarkMapsActivity

When a marker clicked -

- recover the marked tag
- look up tag in placemark database
- put placemark details in card

```
override fun onMarkerClick(marker: Marker): Boolean {  
    async(UI) {  
        val tag = marker.tag as Long  
        val placemark = app.placemarks.findById(tag)  
        currentTitle.text = placemark!!.title  
        currentDescription.text = placemark!!.description  
        imageView.setImageBitmap(readImageFromPath(this@PlacemarkMapsActivity, placemark.image))  
    }  
    return false  
}
```

## Map of All Placemarks

