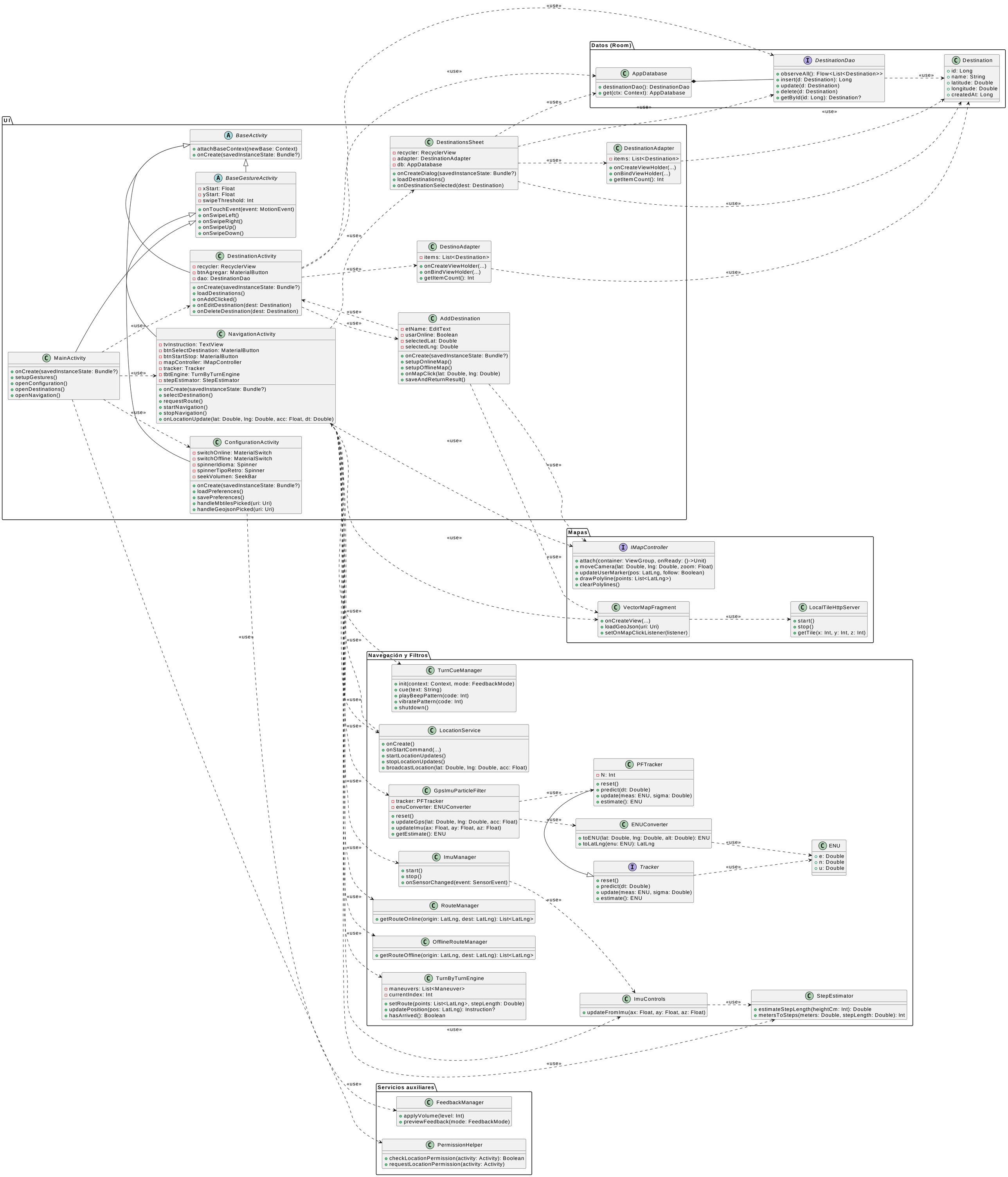
Datos (Room)
AppDatabase
+ destinationDao(): DestinationDao
+ get(ctx: Context): AppDatabase
DestinationDao
+ observeAll(): Flow<List<Destination>>
+ insert(d: Destination): Long
+ update(d: Destination)
+ delete(d: Destination)
+ getById(id: Long): Destination?
Destination
+ id: Long
+ name: String
+ latitude: Double
+ longitude: Double
+ createdAt: Long
UI
BaseActivity
+ attachBaseContext(newBase: Context)
+ onCreate(savedInstanceState: Bundle?)
BaseGestureActivity
- xStart: Float
- yStart: Float
- swipeThreshold: Int
+ onTouchEvent(event: MotionEvent)
+ onSwipeLeft()
+ onSwipeRight()
+ onSwipeUp()
+ onSwipeDown()
DestinationsSheet
- recycler: RecyclerView
- adapter: DestinationAdapter
- db: AppDatabase
+ onCreateDialog(savedInstanceState: Bundle?)
+ loadDestinations()
+ onDestinationSelected(dest: Destination)
DestinationAdapter
- items: List<Destination>
+ onCreateViewHolder(...)
+ onBindViewHolder(...)
+ getItemCount(): Int
DestinationActivity
- recycler: RecyclerView
- btnAgregar: MaterialButton
- dao: DestinationDao
+ onCreate(savedInstanceState: Bundle?)
+ loadDestinations()
+ onAddClicked()
+ onEditDestination(dest: Destination)
+ onDeleteDestination(dest: Destination)
DestinoAdapter
- items: List<Destination>
+ onCreateViewHolder(...)
+ onBindViewHolder(...)
+ getItemCount(): Int
AddDestination
- etName: EditText
- usarOnline: Boolean
- selectedLat: Double
- selectedLng: Double
+ onCreate(savedInstanceState: Bundle?)
+ setupOnlineMap()
+ setupOfflineMap()
+ onMapClick(lat: Double, lng: Double)
+ saveAndReturnResult()
MainActivity
+ onCreate(savedInstanceState: Bundle?)
+ setupGestures()
+ openConfiguration()
+ openDestinations()
+ openNavigation()
NavigationActivity
- tvInstruction: TextView
- btnSelectDestination: MaterialButton
- btnStartStop: MaterialButton
- mapController: IMapController
- tracker: Tracker
- tbtEngine: TurnByTurnEngine
- stepEstimator: StepEstimator
+ onCreate(savedInstanceState: Bundle?)
+ selectDestination()
+ requestRoute()
+ startNavigation()
+ stopNavigation()
+ onLocationUpdate(lat: Double, lng: Double, acc: Float, dt: Double)
ConfigurationActivity
- switchOnline: MaterialSwitch
- switchOffline: MaterialSwitch
- spinnerIdioma: Spinner
- spinnerTipoRetro: Spinner
- seekVolumen: SeekBar
+ onCreate(savedInstanceState: Bundle?)
+ loadPreferences()
+ savePreferences()
+ handleMbtilesPicked(uri: Uri)
+ handleGeojsonPicked(uri: Uri)
Mapas
IMapController
+ attach(container: ViewGroup, onReady: ()->Unit)
+ moveCamera(lat: Double, lng: Double, zoom: Float)
+ updateUserMarker(pos: LatLng, follow: Boolean)
+ drawPolyline(points: List<LatLng>)
+ clearPolylines()
VectorMapFragment
+ onCreateView(...)
+ loadGeoJson(uri: Uri)
+ setOnMapClickListener(listener)
LocalTileHttpServer
+ start()
+ stop()
+ getTile(x: Int, y: Int, z: Int)
Navegación y Filtros
TurnCueManager
+ init(context: Context, mode: FeedbackMode)
+ cue(text: String)
+ playBeepPattern(code: Int)
+ vibratePattern(code: Int)
+ shutdown()
LocationService
+ onCreate()
+ onStartCommand(...)
+ startLocationUpdates()
+ stopLocationUpdates()
+ broadcastLocation(lat: Double, lng: Double, acc: Float)
GpsImuParticleFilter
- tracker: PFTracker
- enuConverter: ENUConverter
+ reset()
+ updateGps(lat: Double, lng: Double, acc: Float)
+ updateImu(ax: Float, ay: Float, az: Float)
+ getEstimate(): ENU
PFTracker
- N: Int
+ reset()
+ predict(dt: Double)
+ update(meas: ENU, sigma: Double)
+ estimate(): ENU
ENUConverter
+ toENU(lat: Double, lng: Double, alt: Double): ENU
+ toLatLng(enu: ENU): LatLng
ENU
+ e: Double
+ n: Double
+ u: Double
Tracker
+ reset()
+ predict(dt: Double)
+ update(meas: ENU, sigma: Double)
+ estimate(): ENU
ImuManager
+ start()
+ stop()
+ onSensorChanged(event: SensorEvent)
RouteManager
+ getRouteOnline(origin: LatLng, dest: LatLng): List<LatLng>
OfflineRouteManager
+ getRouteOffline(origin: LatLng, dest: LatLng): List<LatLng>
TurnByTurnEngine
- maneuvers: List<Maneuver>
- currentIndex: Int
+ setRoute(points: List<LatLng>, stepLength: Double)
+ updatePosition(pos: LatLng): Instruction?
+ hasArrived(): Boolean
ImuControls
+ updateFromImu(ax: Float, ay: Float, az: Float)
StepEstimator
+ estimateStepLength(heightCm: Int): Double
+ metersToSteps(meters: Double, stepLength: Double): Int
Servicios auxiliares
FeedbackManager
+ applyVolume(level: Int)
+ previewFeedback(mode: FeedbackMode)
PermissionHelper
+ checkLocationPermission(activity: Activity): Boolean
+ requestLocationPermission(activity: Activity)
«use»