

The logo graphic consists of several overlapping, rounded, organic shapes in various shades of teal and blue, creating a layered, abstract effect. The background of the entire slide is a dark space with a starry field and a prominent blue and green nebula on the left side.

# TrafficSwipe

Public transportation navigation redefined

# Architecture

- API Interface (replaceable API)
- Data Object factory

# API Integration

```
/**
 * Creates a new api dao for a specific api provider
 * @param apiProvider api provider
 * @return new api dao
 */
public static Entrypoint createTransportApiDao(ApiProvider apiProvider, RequestQueue queue){
    switch (apiProvider) {
        case VVO:
            Log.d(TAG, "createTransportApiDao: " + apiProvider.toString());
            return new VvoEntrypoint(queue);
    }

    return null;
}
```

App can easily be expanded to other transport regions.

# Data object factory

- API needs to implement an interface
- Interface provides factory methods

```
/**
 * Queries stations by name.
 *
 * @param name name to query
 * @return future throwing exception if an error occurs
 */
CompletableFuture<List<Station>> getStops(String name);
```

example

# Context & Adaptation



GPS

- Show stops nearby



Powersaving mode

- Disable GPS



Offline

- Use offline data

Powersaving mode enabled



GPS locating only after confirmation

Where do you want to start?

*Stops nearby*

Powersaving mode is turned on.  
Tab to enable GPS.

### Context

Android power saving mode is enabled (usually in quick settings)

### Adaptation

User needs to confirm to use gps when showing stops nearby.

### Reason:

getting the gps location needs power which the typically wants so save while he is in power saving mode

GPS  
located



Show stops  
nearby

Where do you want  
to start?

*Stops nearby (tap to continue)*

NUP: Nürnberger Platz 3, 8, 61

WPS: Walpurgisstraße 3, 7, 8, 9, ...

HBN: Hauptbahnhof Nord 3, 7, 8, 9, ...

+ Sample non DVB stop 261, 360

### Context

User tapped on showing stops nearby and his position was located

### Adaptation

Stops nearby are shown

### Reason

The user maybe don't know the names of the stops nearby

Network slow  
or offline



Show offline  
results

## Departures Hauptbahnhof

3	Wilder Mann	in 4:30 Minutes
8	Hellerau	in 7:30 Minutes
3	Coschütz	in 14:30 Minutes
8	Südvorstadt	in 17:30 Minutes
3	Wilder Mann	in 24:30 Minutes

Offline Data, because network is too slow

navigate to...



restart

only with stop at...

### Context

Device has no internet connection or network is too slow to load data in time.

### Adaptation

User gets offline results while online results are still loading

### Reason

Getting offline results is better than getting no results, even if they might be out of date.





# TrafficSwipe

[github.com/nadeldrucker/TrafficSwipe](https://github.com/nadeldrucker/TrafficSwipe)

