

Frontend component documentation

Document lists files and custom React Hooks functional components used in the application user interface. All the imports from React and React Material UI are not listed separately in this document. Exports and imports in custom functional React components are listed below.

Files index.html and index.js (imports App from Pallas.js) are automatically generated by create-react-app bootstrap and they render the frontend application itself, which consist of following files:

Pallas.js

- function App
 - Renders page layout depending on hooks' states
 - Stores token for checking if user id logged in
 - Stores almost all the necessary information about application (segments, data of logged in user, etc.)
- exports App
- imports Map, Manage, Info, WeatherTab, BottomNav, WelcomeView, Login, Logout, SnowTypes

BottomNav

- function BottomNav
 - Renders navigation bar (map, snowtypes, weather, management) for laptop and mobile layouts
- exports BottomNav

WelcomeView.js

- function WelcomeView
 - Renders welcome view which contains information about the application and a spot for sponsor logos
- exports WelcomeView

Login.js

- function Login
 - Renders login button and login dialog
 - Includes functionalities of the login at the frontend (api call to user login)
- exports Login

Logout.js

- function Logout
 - Renders logout button and logout dialog
- exports Logout

SnowTypes.js

- function SnowTypes
 - Renders page for information of snowtypes
- exports SnowTypes

NewMap.js

- function Map
 - Renders segments' filtering on the map
 - Handles actions when segment is selected from the map
- exports Map
- imports PallasMap

PallasMap.js

- function PallasMap
 - Renders map
 - imports mablibre-gl package for the map
 - Displays coloring for segments
 - Handles map zooming levels
 - Controls displaying user location
- exports PallasMap

Info.js

- function Info
 - Renders current snow information component (SnowRecordView) of chosen segment
 - Renders dialog and handles snow information update actions on chosen segment (for logged in user)
- exports Info
- imports SnowRecordView

SnowRecordView.js

- function SnowRecordView
 - Renders information about snow situation in chosen segment
- exports SnowRecordView

Manage.js

- function Manage
 - Renders user management view or segment management view (for logged in users)
 - Handles change between the two management views
- exports Manage
- imports SegmentManage, UserManage

SegmentManage.js

- function SegmentManage
 - Renders a view of all segments in the database
 - Renders dialogs for and handles deleting and editing a segment
 - For logged in users (operator or admin)
- exports SegmentManage
- imports AddSegment

AddSegment.js

- function AddSegment
 - Renders dialog for adding new segment
 - Handles functionalities regarding adding new segment
- exports AddSegment

UserManage.js

- function UserManage
 - Renders a view of all users in the database
 - Renders dialogs for and handles deleting and editing user data
 - Stores user data
 - For admin users only
- exports UserManage
- imports AddUser

AddUser.js

- function AddUser
 - Renders dialog for adding new user
 - Handles functionalities regarding adding new user
- exports AddUser

weather/WeatherTab.js

- function WeatherTab
 - Renders components for 3 days weather info and statistics
 - Fetches weather information from Ilmatieteenlaitos API and stores weather information on React hook state
- exports WeatherTab
- imports WeatherInfo, Statistics (also functions from weather/DataCalculations.js)

weather/Statistics.js

- function Statistics
 - Displays short interval and winter weather statistics
- exports Statistics

weather/WeatherInfo.js

- function WeatherInfo
 - Displays information for 3 days weather
- exports WeatherInfo

weather/DataCalculations.js

- Contains different functions for weather data handling and calculation
- This weather data is saved to state of WeatherTab component

EditOwn.js – not in use anymore

- function EditOwn
 - Renders dialog for editing logged in user's own information
 - Handles functionalities regarding editing user's own data
- exports EditOwn