## Модуль пользовательского интерфейса App(): ReactElement NavigationEntry(): ReactElement HorizontalPicker(props: HorizontalPickerProps): ReactElement TextInput(props: TextInputProps): ReactElement LoginScreen(): ReactElement RegisterScreen(): ReactElement HistoryScreen(): ReactElement HomeDrawer(): ReactElement PaymentMethodComponent(props: PMProps): ReactElement AddCard(): ReactElement PaymentsList(): ReactElement ProfileScreen(): ReactElement Status(): ReactElement Pointer(): ReactElement HomeScreen(): ReactElement RideRequest(): ReactElement DriverOnRideStatus(): ReactElement SearchBlock(): ReactElement SearchResultsBlock(): ReactElement ChooseClass(): ReactElement CustomerRideStatus(): ReactElement

Модуль мобильной бизнес-логики appSaga() initializationSaga() loginSaga(action: Action) listenForLogin() logoutSaga() listenForLogout() registerSaga(action: Action) listenForRegister() fetchHistorySaga() listenForFetchHistory() getUserSaga() getPaymentMethods() listenForGetPaymentMethods() removePaymentMethodSaga(action: Action) listenForRemovePaymentMethod() setAsDefaultPaymentMethodSaga(action: Action) listenForSetAsDefaultPaymentMethod() addCardSaga(action: Action) listenForAddCard() paySaga(action: Action) istenForPay() inititializeMapSaga() listenForInitializeMap() receiveLocationUpdateSaga(action: Action) bootstrapGPSSubscription() receiveWebSocketMessageSaga(action: Action) bootstrapWebSocketSubscription() chooseRouteSaga() listenForChooseRoute() fetchPlacesSaga() listenForFetchPlaces() prepareRideDataSaga(action: Action) listenForPrepareRideData() requestRideSaga(action: Action) istenForRequestRide() setChosenLocationSaga(action: Action) listenFirSetChosenLocation() setRouteLocationSaga(action: Action) stenForSetRouteLocation()

+post<K, T>(route: string, data: K): Promise<Response<T>> +get<K, T>(route: string, config: K): Promise<Response<T>> ConnectionGatewayAPI -authToken: string -isClient: boolean -listeners: Array<WSMessage => void> -socket: Socket | null +setIsClient(isClient: boolean) +setAuthToken(token: string) +addEventListener(listener: WSMessage => void): () => void +connect() +send<T>(event: WSMessageType, data: T) +disconnect() -retryConnection()

RestGatewayAPI

+setAuthToken(token: string): AxiosInstance

-authToken: string

+initialize()

axios: AxiosInstance

PaymentsAPI

-restGatewayAPI: RestGatewayAPI
+getPaymentMethods(): Promise<Response<Array<PaymentMethod>>>
+setAsDefaultMethod(id: number): Promise<Response<unknown>>
+addCard(data: CardMethodDetails): Promise<Response<unknown>>
+createPaymentIntent(data: CreatePaymentIntentInput):
Promise<Response<string>>
+removePaymentMethod(id: number): Promise<Response<unknown>>
+paymentFinished(data: PaymentFinishedInput):
Promise<Response<unknown>>

NavigationService
-navigationRef: NavigationContainerRef<any> | null
+setNavigationRef(ref: NavigationContainerRef<any>
+goBack()

MapService
-map: MutableRefObject<MapView>
+getMapRef(): MutableRefObject<MapView>
+animateCamera(location: Location, zoom: number)
+animateToRegion(pos1: Location, pos2: Location)

# HatestLocation: Location

+initialize()

+getLocation(): Location

+subscribeToPositionChange(Location => void):
() => void

Модуль работы с хранилищем

userReducer(state: UserState, action: Action<any>):
UserState
historyReducer(state: HistoryState, action:
Action<any>): HistoryState
paymentsReducer(state: PaymentsState, action:
Action<any>): PaymentsState
homeReducer(state: HomeState, action:
Action<any>): HomeState
rootReducer(state: ApplicationState, action:
Action<any>): ApplicationState

-restGatewayAPI: RestGatewayAPI
-connectionGatewayAPI: ConnectionGatewayAPI
+decode(data: Location):
Promise<Response<ExtendedLocation>>
+updateMyLocation(data: Location):
+requestRide(data: ExtendedRequestRide)
+answerToRideRequest(answer: WSMessageType)
+fetchPlaces(toSearch: string):
Promise<Response<Array<ExtendedLocation>>>
+calculateRideData(from: ExtendedLocation, to:
ExtendedLocation):
Promise<Response<RideRequest>>
+declineRideRequest()
+updateRideStatus(status: RideStatus)

-restGatewayAPI: RestGatewayAPI
+login(email: string, password: string):
Promise<Response<Tokens>>
+register(data: RegisterPayload):
Promise<Response<Tokens>>
+refreshTokens<K, T>(token: string):
Promise<Response<Tokens>>

ProfileAPI

+getUser(): Promise<Response<User>>>

HistoryAPI

-restGatewayAPI: RestGatewayAPI
+getHistory():

Promise<Response<Array<Ride>>>

restGatewayAPI: RestGatewayAPI

<enumeration>> WSMessageType
RideRequest
RideStatusChange
RideAccept
RideStopSearch
RideTimeout
LocationUpdate

Tokens
+token: string
+refreshToken: string

+calculatedTime: number
+route: Array<Location>
+to: ExtendedLocation
+from: ExtendedLocation
+cost: number
+carClass: CarClass

<enumeration>> CardBrand
Visa
Mastercard
AmericanExpress

+id: number +carBrand: string +carClass: CarClass +balance: number

<enumeration>> CarClass
Economy
Comfort
Business

+id: number
+client: User
+driver: User
+const: number
+payment: Optional<Payment>
+startTime: number
+endTime: number
+to: string
+from: string
+status: RideStatus
+paid: boolean

<enumeration>> RideStatus
Starting
InProgress
Completed
NoRide

+id: number
+email: string
+phone: string
+firstName: string
+lastName: string
+gender: Gender
+driver: Optional<Driver>

<enumeration>>
PaymentMethodType

Cash
Card

Location
Hatitude: number
Hongitude: number

<<enumeration>> Gender
Male
Female

ExtendedLocation

+latitude: number

+longitude: number

+readableDescription: string

RideRequest
+calculatedTime: number
+route: Array<Location>
+classes: Record<CarClass, number>

PaymentMethod

Optional<PaymentMethodDetails>

PaymentMethodDetails

+id: number
+lastFour: string
+exp: string
+holder: string

+type: PaymentMethodType

+id: number

+isDefault: boolean

+brand: CardBrand

+stripePaymentId: string

AuthController -authService: AuthService -constructor(authService: AuthService) +login(data: LoginInput): Promise<Tokens> +register(data: RegisterInput): Promise<Tokens> -refreshTokens(data: RefreshInput): Promise<Tokens> UserController -userService: UserService +constructor(userService: UserService) +getUser(req: Request): Promise<User> +getHistory(req: Request): Promise<Array<Ride>> +getCurrentStatus(eq: Request): Promise<Ride | null> PaymentController -paymentService: PaymentService +constructor(paymentService: PaymentService) +getPaymentMethods(): Promise<Array<PaymentMethod>> +setDefaultMethod(req: Request, data: SetAsDefaultOrRemoveInput): Promise<StatusWrapper> +addCard(req: Request, data: AddCardInput): Promise<StatusWrapper> +createPaymentIntent(req: Request, data: CreatePaymentIntentInput): Promise<CreatePaymentIntentOutput> +confirmPayment(req: Request, data: ConfirmPaymentInput): Promise<StatusWrapper> +removePaymentMethod(req: Request, data: SetAsDefaultOrRemoveInput): Promise<StatusWrapper> MapsController -mapsService: MapsService +constructor(mapsService: MapsService) +decode(data: DecodeInput): Promise<DecodeOutput> +direction(data: DirectionInput): Promise<DirectionOutput> +places(data: PlacesInput): Promise<PlacesOutput> RTCController -rtcService: RTCService +constructor(rtcService: RTCService) +handleConnection(socket: Socket) +handleDisconnect(socket: Socket) +handleLocationUpdate(data: WithUserRole<Location>, socket: Socket) +handleRideRequest(data: WithUserRole<ExtendedRideRequest>, socket: Socket) +handleRideStopSearch(socket: Socket) +handleRideStatusChange(data: WithUserRole<RideStatus>, socket: Socket)

AuthService Repository -authDataRepository: AuthDataRepository -tokenProvider: TokenProvider -userService: UserService AuthDataRepository hasher: Hasher +constructor(authService: AuthService, tokenProvider: TokenProvider, userService: UserService, hasher: Hasher) +login(email: string, password: string): Promise<Tokens> UserRepository +register(data: RegisterInput): Promise<Tokens> refreshTokens(data: RefreshInput): Promise<Tokens> **UserService DriverRepository** -userRepository: UserRepository -driverRepository: DriverRepository -paymentService: PaymentService -rideRepository: RideRepository RideRepository +constructor(userRepository: UserRepository, driverRepository: DriverRepository, paymentService: PaymentService, rideRepository: RideRepository) **PaymentRepository** +getUser(id: number): Promise<User> +createUser(data: RegisterInput): Promise<User> +getHistory(id: number): Promise<Array<Ride>> +getLatestRide(id: number): Promise<Ride | null> PaymentMethodRepository PaymentService -paymentRepository: PaymentRepository -paymentMethodRepository: PaymentMethodRepository PaymentMethodDetailsRepository -paymentMethodDetailsRepository: PaymentMethodDetailsRepository -userRepository: UserRepository -rideRepository: RideRepository +constructor(paymentRepository: PaymentRepository, -stripeSecretKey: string paymentMethodRepository: PaymentMethodRepository, -usdRate: number paymentMethodDetailsRepository: -stripe: StripeSDK PaymentMethodDetailsRepository, userRepository: +createIntent(email: string, amount: number, UserRepository, rideRepository: RideRepository, stripe: requestThreeDSecure: string, cusromerId: Optional<number>): Promise<CreateIntentOutput> +getPaymentMethods(): Promise<Array<PaymentMethod>> +setDefaultMethod(userId: number, methodId: number) +addCard(req: Request, data: AddCardInput) +createPaymentIntent(userId: number, data: CreatePaymentIntentInput): +client: Client Promise<CreatePaymentIntentOutput> +confirmPayment(userId: number, data: ConfirmPaymentInput) +removePaymentMethod(userId: number, methodId: Directions -maps: GoogleMaps mockDirections: string +constructor(maps: GoogleMaps) MapsService +getDirection(from: Location, to: Location): -places: Places Geocoding directions: Directions +constructor(geocoding: Geocoding, places: Places, -maps: GoogleMaps -mockGeocoding: string directions: Directions) +decode(data: Location): Promise<ExtendedLocation> geoUtils: GeoUtils +getDirection(from: Location, to: Location): +constructor(geoUtils: GeoUtils, maps: GoogleMaps) decode(data: Location): Promise<ExtendedLocation> Promise<DirectionOutput> +searchPlaces(toSearch: string): Promise<Array<ExtendedLocation>> Places -maps: GoogleMaps -mockPlaces: string RTCService -constructor(maps: GoogleMaps) -idBasedSocketHolder: Map<number, Socket> +search(toSearch: string): -socketBasedIdHolder: WeakMap<Socket, number> Promise<Array<ExtendedLocation>> -clientDataHolder: Map<number, SocketUserInfo> -driverDataHolder: Map<number, DriverSocketUserInfo> -tokenProvider: TokenProvider -userService: UserService -geoUtils: GeoUtils -rideRepository: RideRepository +constructor(tokenProvider: TokenProvider, userService: UserService, geoUtils: GeoUtils, rideRepository: RideRepository) +getUserFromSocket(socket: Socket): Promise<User> +addUser(socket: Socket) +removeUser(socket: Socket) +handleLocationUpdate(data: WithUserRole<Location>, socket: Socket) handleRideRequest(data: WithUserRole<ExtendedRideRequest>, socket: Socket) +handleRideStopSearch(socket: Socket) +handleRideStatusChange(data: VithUserRole<RideStatus>, socket: Socket)

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