CareSync Packages Overview

Frontend:

Package Name	Description	Reason For Using
@emotion/react	A library designed for writing css styles with JavaScript.	Style React components.
@emotion.styled	A way to create React components that have styles attached to them.	Create React components that have styles attached to them.
@fullcalendar/core	The core package for rendering FullCalendar.	Render FullCalendar.
@fullcalendar/daygrid	Display events on FullCalendar on a month view or "day-grid" view.	Display events on Fullcalendar in a month view.
@fullcalendar/interaction	FullCalendar functionality for drag-n-drop, resizing, dateclick, and other selectable actions.	Allow the user to select dates/shifts to display shift information for that day.
@fullcalendar/react	The actual FullCalendar component used for scheduling shifts.	Display a calendar for the user to visualize the upcoming schedule for the patient.
@mui/icons-material	This package provides the Google Material Icons converted to SvgIcon components.	Provide clean/recognizable icons for the user to interact with.
@mui/material	MUI Core contains foundational React UI component libraries for shipping new features faster.	Expedite development and usability through beautiful premade components. dcf
@mui/x-date-pickers	MUI extension that provides date and time picker components.	Easily allow users to choose dates with finely tuned premade date pickers.

dayjs	Day.js is a minimalist JavaScript library that parses, validates, manipulates, and displays dates and times for modern browsers	Convert dates into the timezone of the user accessing shift information. Provide dates for the MUI date picker
axios	Promise based HTTP client for the browser and node.js	Make api requests.
framer-motion	An open source motion library for React.	Create animations for loaders and transitions.
jest	A comprehensive JavaScript testing solution.	Testing JavaScript functions and React components.

Backend:

Package Name	Description	Reason for Using
bcryptjs	A bcrypt library for NodeJS	Encrypting user passwords for security purposes.
cloudinary	The Cloudinary Node SDK that allows you to integrate your application with Cloudinary.	Storing pdf versions of incident reports and shift notes.
cookie-parser	Parsing cookie headers and populating req.cookies with an object keyed by the cookie name.	Capture HTTPOnly cookies to authenticate the user for protected backend routes.
cors	CORS is a node.js package for providing a Connect/Express middleware that can be used to enable CORS with various options.	Enable CORS requests from the React frontend
dotenv	Dotenv is a zero-dependency module that loads environment variables from a .env file into process.env.	Loads environment variables from the .env file.
express-async-handler	Simple middleware for handling exceptions inside of async express routes and passing them to express error handlers.	Keeps code DRY and readable by removing the need for try/catch statements on the backend routes.
get-stream	Get a stream as a string, buffer, or array	To get the stream created by pdfkit as a buffer so it could be sent to Cloudinary.
jsonwebtoken	An implementation of JSON Web Tokens.	To encode and decode user/patient information into json webtokens for authentication and security.
mongoose	Mongoose is a MongoDB object modeling tool designed to work in an asynchronous environment.	Model and CRUD operations for MongoDB database documents

nodemailer	Nodemailer is a module for Node.js applications to allow easy as cake email sending.	Send verification emails to new users and invite carers to join a patient's care team.
pdfkit	A PDF document generation library for Node and the browser that makes creating complex, multi-page, printable documents easy.	Create pdfs out of user-entered incident reports and shift notes.
streamifier	Converts a buffer or a stream into a readable stream	Convert the buffer created by pdf kit into a stream for dispatch to Cloudinary.
mongoose-type-email	An email field-type for Mongoose schemas	Validate email structure in the User model.
cross-env	Run scripts that set and use environment variables across platforms	Set environment variables across platforms.
jest	A comprehensive JavaScript testing solution.	Writing tests for backend functions/routes.
nodemon	Simple monitor script for use during development of a Node.js app.	Listen for changes in the backend code then automatically restarting the server so changes take effect.
supertest	Provide a high-level abstraction for testing HTTP	Assist jest by providing high level abstraction for testing HTTP.