

Class Name: OutlookCalendarIntegration	
Parent Class (if any): None	
Subclasses (if any): None	
Responsibilities: <ul style="list-style-type: none"> <li>• Generate Microsoft OAuth URLs for authentication</li> <li>• Test connectivity to Microsoft Graph API</li> <li>• Process calendar data to extract availability information</li> <li>• Calculate available time slots from busy periods</li> <li>• Find overlapping availability across multiple users</li> <li>• Format and display availability results</li> <li>• Ensure privacy by only accessing free/busy information</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• TimeSlot</li> <li>• User</li> <li>• Microsoft Graph API (external)</li> </ul>

Class Name: TimeSlot	
Parent Class (if any): None	
Subclasses (if any): None	
Responsibilities: <ul style="list-style-type: none"> <li>• Store start and end times for a calendar slot</li> <li>• Store time zone information</li> <li>• Provide duration calculation</li> <li>• Format time slots for display</li> <li>• Support comparison operations with other time slots</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• OutlookCalendarIntegration</li> </ul>

Class Name: User	
Parent Class (if any): None	
Subclasses (if any): None	
Responsibilities: <ul style="list-style-type: none"> <li>• Store user identification information</li> <li>• Track calendar connection status</li> <li>• Maintain list of busy time slots</li> <li>• Provide access to user's availability data</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• OutlookCalendarIntegration</li> <li>• TimeSlot</li> </ul>

Class Name: OutlookConnector	
Parent Class (if any): React.Component	
Subclasses (if any): None	
Responsibilities: <ul style="list-style-type: none"> <li>• Provide UI for connecting Outlook calendars</li> <li>• Display connection status</li> <li>• Allow users to disconnect their calendar</li> <li>• Show available times with appropriate formatting</li> <li>• Enable date range selection for availability checks</li> <li>• Handle loading states and error messages</li> <li>• Communicate with backend API</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• Backend API endpoints</li> <li>• React state management</li> </ul>

Class Name: CalendarAPI (Service)	
Parent Class (if any): React.Component	
Subclasses (if any): None	
Responsibilities: <ul style="list-style-type: none"> <li>• Make HTTP requests to backend endpoints</li> <li>• Handle authentication token management</li> <li>• Process calendar data responses</li> <li>• Provide error handling for API calls</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• OutlookConnector</li> <li>• Backend API endpoints</li> </ul>

Class Name: TimeFormatter (Utility)	
Parent Class (if any): None	
Subclasses (if any): None	
Responsibilities: <ul style="list-style-type: none"> <li>• Format date and time values for display</li> <li>• Calculate and format durations</li> <li>• Handle time zone conversions</li> <li>• Provide consistent time formatting across the application</li> </ul>	Collaborators: <ul style="list-style-type: none"> <li>• OutlookConnector</li> <li>• Other UI components</li> </ul>