Task Management:

1. To-do list: (Design a user-friendly interface for teachers to create and manage their to-do lists.)

Include features like:

* Task creation with due dates and priorities
* Task editing and deletion
* Task categorization (by subject, class or type)
* Task filtering and sorting

1. Reminders:

* Integrate a reminder system that sends notifications to teachers about upcoming tasks or deadlines.
* Allow teachers to set reminders for specific tasks or events.
* Use a scheduling algorithm to ensure reminders are sent at the right time.

1. Notifications:

* Implement a notification system that alerts teachers about important events, such as
* Upcoming meetings or appointments.
* New messages or comments from students or colleagues
* Task deadlines or reminders.

Classroom Management:

1. Class Scheduling: (Create a scheduling system for teachers to manage their class schedules.)

Include features like:

* Class creation with dates, times, and locations
* Class editing and deletion
* Class scheduling conflicts detection

2. Student Management: (Design a system for teachers to manage their students' information)

* Student profiles with contact information and grades
* Student attendance tracking
* Student performance monitoring

3. Grade Management: (Implement a grading system for teachers to track student progress.)

* Grade creation and editing
* Grade calculation and averaging
* Grade reporting and exporting

Resource Library Features:

1. Resource Types: (Include various resource types, such as:)

* + Books and e-books
  + Articles and research papers
  + Videos and tutorials
  + Audio files and podcasts
  + Images and infographics
  + Data sources and datasets
  + Lesson plans and worksheets

2. Search and Filter: Implement a robust search function with filters, allowing teachers to quickly find resources by:

* + Keyword
  + Subject
  + Grade level
  + Resource type
  + Author
  + Date

3. Resource Upload and Sharing: (Enable teachers to upload and share their own resources)

* + Files and documents
  + Links to external resources
  + Personal notes and annotations

4. Resource Organization: Provide features for organizing resources, such as:

* + Creating folders and categories
  + Tagging and labeling resources
  + Favoriting and bookmarking resources

5. Resource Recommendations: Offer personalized resource recommendations based on teachers' interests, search history, and subject areas.

6. Resource Reviews and Ratings: Allow teachers to rate and review resources, providing feedback and helping others make informed decisions.

7. Integration with Other Features: Seamlessly integrate the resource library with other app features, such as lesson planning and classroom management.

- Frames: (App Design)

- Home Screen

- Task Management

- Classroom Management

- Grade Management

- Notifications

- Settings

- Components:

- Top Navigation Bar

- Hero Section

- Featured Sections

- Task List View

- Task Creation Form

- Class List View

- Class Creation Form

- Student Profile View

- Grade List View

- Grade Creation Form

- Notification List View

- Notification Creation Form

- Profile Settings View

- App Settings View

- Styles:

- Colors

- Typography

- Spacing

- Borders

To integrate your app with Google Classroom, you'll need to use a combination of software and tools. Here are some options:

1. Google Classroom API: This is the primary API for interacting with Google Classroom. You'll need to register your app with Google and obtain an API key.

2. Google OAuth 2.0: This is the authentication mechanism used by Google Classroom. You'll need to implement OAuth 2.0 in your app to authenticate users.

3. API Client Libraries: Google provides API client libraries for various programming languages, such as Java, Python, and JavaScript. These libraries simplify the process of interacting with the Google Classroom API.

4. Integration Platforms: If you're building a web or mobile app, you can use integration platforms like Zapier, MuleSoft, or Jitterbit to connect your app with Google Classroom.

Some popular software development tools and platforms that can help you integrate your app with Google Classroom include:

1. Node.js: A popular JavaScript runtime environment for building server-side applications.

2. Python: A versatile programming language for building web and mobile applications.

3. Java: A popular programming language for building Android apps and enterprise software.

4. React Native: A cross-platform framework for building mobile apps.

5. Flutter: A cross-platform framework for building mobile apps.