

```
// lib/access-control.ts
```

```
interface Document {  
  user_id: string;  
  permissions: {  
    can_read: string[];  
    can_write: string[];  
    can_delete: string[];  
    is_public: boolean;  
  };  
}
```

```
export const AccessControl = {  
  canRead(document: Document, userId: string): boolean {  
    return (  
      document.user_id === userId ||  
      document.permissions.can_read.includes(userId) ||  
      document.permissions.is_public  
    );  
  },  
  
  canWrite(document: Document, userId: string): boolean {  
    return document.user_id === userId || document.permissions.can_write.includes(userId);  
  },  
  
  canDelete(document: Document, userId: string): boolean {  
    return document.user_id === userId || document.permissions.can_delete.includes(userId);  
  }  
};
```

}

};