```
// DocumentComponents.tsx
import { useState } from "react"
import { format } from 'date-fns'
import
          {
               Card,
                         CardContent,
                                           CardFooter,
                                                            CardHeader,
                                                                             CardTitle
                                                                                           }
                                                                                                from
"../spread_sheet_swarm/ui/card"
import { File, FileText, FileSpreadsheet, FileImage, FileIcon, FileJson, Share2, Plus } from
"lucide-react"
import { Button } from "../spread_sheet_swarm/ui/button"
import {
 Dialog,
 DialogContent,
 DialogDescription,
 DialogFooter,
 DialogHeader,
 DialogTitle,
 DialogTrigger,
} from "../spread_sheet_swarm/ui/dialog"
import { Label } from "../spread_sheet_swarm/ui/label"
import { Input } from "../spread sheet swarm/ui/input"
import { ScrollArea } from "../ui/scroll-area"
import { AccessControl } from "@/lib/access-control"
import { Select, SelectContent, SelectItem, SelectTrigger, SelectValue } from "../ui/select"
// Types
interface User {
 id: string;
```

```
email: string;
 role: 'admin' | 'user';
 organization_id?: string;
}
interface Document {
 id: string;
 name: string;
 type: string;
 size: string;
 user_id: string;
 organization_id?: string;
 uploaded_by_email: string;
 upload_date: string;
 content: string;
 checksum: string;
 version: number;
 last_modified: string;
 status: 'processing' | 'completed' | 'error';
 metadata?: Record<string, any>;
 permissions: {
  can_read: string[];
  can_write: string[];
  can_delete: string[];
  is_public: boolean;
 };
```

```
interface DocumentCardProps {
 document: Document;
 currentUser: User;
 onShare: (shareWith: { email: string; permissions: ('read' | 'write' | 'delete')[] }) => void;
 onClick: () => void;
}
interface ShareDocumentDialogProps {
 isOpen: boolean;
 onClose: () => void;
 onShare: (shareWith: { email: string; permissions: ('read' | 'write' | 'delete')[] }) => void;
}
interface DocumentDetailsModalProps {
 document: Document;
 currentUser: User;
 onClose: () => void;
 onShare: (shareWith: { email: string; permissions: ('read' | 'write' | 'delete')[] }) => void;
}
// Document Card Component
const DocumentCard = ({ document, currentUser, onShare, onClick }: DocumentCardProps) => {
 const [showShareDialog, setShowShareDialog] = useState(false);
```

}

```
const getIconForDocumentType = (type: string) => {
  switch (type) {
   case "txt":
    return <FileText className="h-6 w-6" />
   case "csv":
    return <FileSpreadsheet className="h-6 w-6" />
   case "pdf":
    return <FileIcon className="h-6 w-6" />
   case "image":
    return <FileImage className="h-6 w-6" />
   case "json":
    return <FileJson className="h-6 w-6" />
   default:
    return <File className="h-6 w-6" />
  }
 };
 return (
  <>
           <Card className="flex flex-col cursor-pointer hover:shadow-lg transition-shadow
duration-200">
     <CardHeader className="flex flex-row items-center justify-between">
      <CardTitle className="flex items-center gap-2">
       {getIconForDocumentType(document.type)}
       <span className="truncate">{document.name}</span>
      </CardTitle>
```

```
{AccessControl.canWrite(document, currentUser.id) && (
  <Button
   variant="ghost"
   size="sm"
   onClick={(e) => {
    e.stopPropagation();
    setShowShareDialog(true);
   }}
   <Share2 className="h-4 w-4" />
  </Button>
 )}
</CardHeader>
<CardContent onClick={onClick}>
 Type: {document.type}
 Size: {document.size}
 Uploaded by: {document.uploaded_by_email}
</CardContent>
<CardFooter className="text-sm text-gray-400 mt-auto">
 Uploaded on {format(new Date(document.upload_date), 'MMM dd, yyyy')}
</CardFooter>
</Card>
{showShareDialog && (
<ShareDocumentDialog
 isOpen={showShareDialog}
```

```
onClose={() => setShowShareDialog(false)}
      onShare={onShare}
    />
   )}
  </>
 );
};
// Share Document Dialog Component
const ShareDocumentDialog = ({ isOpen, onClose, onShare }: ShareDocumentDialogProps) => {
 const [email, setEmail] = useState(");
 const [permissions, setPermissions] = useState<('read' | 'write' | 'delete')[]>(['read']);
 const handleShare = () => {
  onShare({ email, permissions });
  onClose();
 };
 return (
  <Dialog open={isOpen} onOpenChange={onClose}>
   <DialogContent>
     <DialogHeader>
      <DialogTitle>Share Document</DialogTitle>
      <DialogDescription>
       Enter the email of the user you want to share this document with.
      </DialogDescription>
```

```
</DialogHeader>
<div className="grid gap-4 py-4">
 <div className="grid grid-cols-4 items-center gap-4">
  <Label htmlFor="email" className="text-right">
   Email
  </Label>
  <Input
   id="email"
   type="email"
   value={email}
   onChange={(e) => setEmail(e.target.value)}
   className="col-span-3"
  />
 </div>
 <div className="grid grid-cols-4 items-center gap-4">
  <Label className="text-right">Permissions</Label>
  <div className="col-span-3 flex gap-2">
   <label className="flex items-center gap-2">
    <input
     type="checkbox"
     checked={permissions.includes('read')}
     onChange={(e) => {
       if (e.target.checked) {
        setPermissions([...permissions, 'read']);
       } else {
        setPermissions(permissions.filter(p => p !== 'read'));
```

```
}
  }}
 />
 Read
</label>
<label className="flex items-center gap-2">
 <input
  type="checkbox"
  checked={permissions.includes('write')}
  onChange={(e) => {
   if (e.target.checked) {
    setPermissions([...permissions, 'write']);
   } else {
    setPermissions(permissions.filter(p => p !== 'write'));
   }
  }}
 />
 Write
</label>
<label className="flex items-center gap-2">
 <input
  type="checkbox"
  checked={permissions.includes('delete')}
  onChange={(e) => {
   if (e.target.checked) {
    setPermissions([...permissions, 'delete']);
```

```
} else {
            setPermissions(permissions.filter(p => p !== 'delete'));
          }
         }}
        />
        Delete
       </label>
      </div>
     </div>
    </div>
    <DialogFooter>
     <Button onClick={onClose} variant="outline">Cancel</button>
     <Button onClick={handleShare}>Share</Button>
    </DialogFooter>
   </DialogContent>
  </Dialog>
);
};
// Document Preview Component
const DocumentPreview = ({ document }: { document: Document }) => {
 switch (document.type) {
  case "csv":
   return (
```

```
{document.content.split("\n").map((row, i) => (}
      {row.split(",").map((cell, j) => (}
        {cell}
       ))}
      ))}
    );
 case "txt":
  return className="whitespace-pre-wrap">{document.content};
 case "pdf":
  return (
   <div className="text-center">
    PDF preview not available.
    <Button className="mt-2">Download PDF</Button>
   </div>
  );
 case "image":
  return <img src={document.content} alt={document.name} className="max-w-full h-auto" />;
 default:
  return Preview not available for this file type.;
}
```

};

```
// Document Details Modal Component
const
        DocumentDetailsModal
                                     ({
                                          document,
                                                      currentUser,
                                                                     onClose,
                                                                                 onShare
                                                                                            }:
DocumentDetailsModalProps) => {
 const [showShareDialog, setShowShareDialog] = useState(false);
 return (
  <>
   <Dialog open={true} onOpenChange={onClose}>
    <DialogContent className="sm:max-w-[700px]">
     <DialogHeader>
       <div className="flex items-center justify-between">
        <DialogTitle>{document.name}</DialogTitle>
        {AccessControl.canWrite(document, currentUser.id) && (
         <Button
          variant="outline"
          size="sm"
          onClick={() => setShowShareDialog(true)}
          <Share2 className="h-4 w-4 mr-2" />
          Share
         </Button>
        )}
       </div>
       <DialogDescription>
        Type: {document.type.toUpperCase()} | Size: {document.size} |
                              Uploaded by: {document.uploaded_by_email} on {format(new
```

```
Date(document.upload_date), 'MMM dd, yyyy')}
      </DialogDescription>
     </DialogHeader>
     <div className="mt-4">
      <h3 className="text-lg font-semibold mb-2">Preview:</h3>
       <ScrollArea className="h-[300px] w-full rounded-md border p-4">
        <DocumentPreview document={document} />
       </ScrollArea>
     </div>
     <DialogFooter>
      <Button onClick={onClose}>Close</Button>
     </DialogFooter>
    </DialogContent>
   </Dialog>
   {showShareDialog && (
    <ShareDocumentDialog
     isOpen={showShareDialog}
     onClose={() => setShowShareDialog(false)}
     onShare={onShare}
    />
   )}
  </>
);
};
```

```
// DocumentComponents.tsx (Add this to the previous file)
interface AddDocumentDialogProps {
  onAddDocument: (doc: Omit<Document, 'user_id' | 'organization_id' | 'uploaded_by_email'>) =>
void;
}
const AddDocumentDialog = ({ onAddDocument }: AddDocumentDialogProps) => {
 const [name, setName] = useState("");
 const [type, setType] = useState("");
 const [size, setSize] = useState("");
 const [content, setContent] = useState("");
 const handleSubmit = () => {
  const newDocument: any = {
   id: uuidv4(),
   name,
   type,
   size,
   content,
   checksum: ",
   version: 1,
   last_modified: new Date().toISOString(),
   upload_date: new Date().toISOString(),
   status: 'processing' as const,
   metadata: {},
```

```
permissions: {
   can_read: [],
   can_write: [],
   can_delete: [],
   is_public: false,
  },
 };
 onAddDocument(newDocument);
 setName("");
 setType("");
 setSize("");
 setContent("");
};
return (
 <Dialog>
  <DialogTrigger asChild>
   <Button>
     <Plus className="mr-2 h-4 w-4" /> Add Document
   </Button>
  </DialogTrigger>
  <DialogContent className="sm:max-w-[425px]">
   <DialogHeader>
     <DialogTitle>Add New Document
    <DialogDescription>
      Enter the details of the new document you want to add to the data hub.
```

```
</DialogDescription>
</DialogHeader>
<div className="grid gap-4 py-4">
 <div className="grid grid-cols-4 items-center gap-4">
  <Label htmlFor="name" className="text-right">
   Name
  </Label>
  <Input
   id="name"
   value={name}
   onChange={(e) => setName(e.target.value)}
   className="col-span-3"
 />
 </div>
 <div className="grid grid-cols-4 items-center gap-4">
  <Label htmlFor="type" className="text-right">
   Type
  </Label>
  <Select value={type} onValueChange={setType}>
   <SelectTrigger className="col-span-3">
    <SelectValue placeholder="Select document type" />
   </SelectTrigger>
   <SelectContent>
    <SelectItem value="txt">Text</SelectItem>
    <SelectItem value="csv">CSV</SelectItem>
    <SelectItem value="pdf">PDF</SelectItem>
```

```
<SelectItem value="image">Image</SelectItem>
   <SelectItem value="json">JSON</SelectItem>
  </SelectContent>
 </Select>
</div>
<div className="grid grid-cols-4 items-center gap-4">
<Label htmlFor="size" className="text-right">
  Size
 </Label>
 <Input
  id="size"
  value={size}
  onChange={(e) => setSize(e.target.value)}
  className="col-span-3"
  placeholder="e.g., 2.3 MB"
/>
</div>
<div className="grid grid-cols-4 items-center gap-4">
 <Label htmlFor="content" className="text-right">
  Content
 </Label>
 <Input
  id="content"
  value={content}
  onChange={(e) => setContent(e.target.value)}
  className="col-span-3"
```

```
placeholder="Enter content or file path"
      />
      </div>
     </div>
    <DialogFooter>
      <Button type="submit" onClick={handleSubmit}>
       Add Document
      </Button>
    </DialogFooter>
   </DialogContent>
  </Dialog>
 );
};
export { DocumentCard, ShareDocumentDialog, DocumentDetailsModal, DocumentPreview,
AddDocumentDialog };
function uuidv4() {
 throw new Error("Function not implemented.")
}
```