

Companion File Browser

Team Name: SDDEC19-11

Client: Kirit Chandran

Adviser: Dr. Zheng

<https://sddec19-11.sd.ece.iastate.edu>

Project Plan

File Companion Browser - SDDEC19-11

Project Plan

▶ Problem Statement

- ▶ Buildertrend wants a new sub-system extension for their current software product which is a web application
 - ▶ Cloud file sharing system that allows users to sync and download files on the cloud
 - ▶ Provide users easy collaborations, error recovery, and high accessibility

Project Plan

► Conceptual Sketch

Brian - Supervisor Logout Settings

My Files
Shared Files
Trash

Name	Comment	Last Modified
Folder_name		4/25/2020 Download More
Folder_name		4/25/2020 Download More
Title (File_name)		4/25/2020 Download More
File Type	Last Modified	Modified By User
.doc	4/25/2020	Jake
	Size	
	23MB	
Comment may go here if too.		
Delete History Link		
Folder_name		4/25/2020 Download More

Upload Files

File 31: File Uploaded

File 51: 93%
43MB / 58MB

File Companion Browser - SDDEC19-11

Brian - Supervisor Profile

Basic Account Information

Basic Information

Number of Files: 33

Last Added File: File32

Last Edited File: File22

Deleted Files: 2

Your Information

Full Name

Email

Password

Confirm Password

Access Code

Submit

Project Plan

- ▶ **Functional Requirements**
 - ▶ Upload files
 - ▶ Downloading files
 - ▶ User can set permission roles for other users
 - ▶ i.e. (view and edit)
 - ▶ Browse uploaded files and view history
 - ▶ Download previous versions of files

Project Plan

- ▶ **Non-functional Requirements**
 - ▶ **User friendly UI**
 - ▶ **Max file size of 50 MB**
 - ▶ **Multiple user able to download the same file at the same time.**

Project Plan

- ▶ **Constraints**
 - ▶ UI built using react.js
 - ▶ Web backend built with C#, ASP.NET
- ▶ **Technical**
 - ▶ Routing
 - ▶ Server Side/Client Side Rendering
- ▶ **Considerations**
 - ▶ Safety - Session Token
 - ▶ Concurrency - File Locks

Project Plan

- ▶ **Market Survey**
 - ▶ **Similar Products**
 - ▶ **Dropbox**
 - ▶ **Google Drive**

Project Plan

▶ Potential Risks & Mitigation

▶ Compatibility

- ▶ Server easily interface w/ existing desktop application

▶ Delivery Time

- ▶ Features/Parts might not get delivered due to time constraint/technical issue/software bugs.

▶ Mitigation

- ▶ Trello board for task management
- ▶ Continuous testing and communication

Project Plan

► Project Milestones & Schedule

TASK NAME	ASSIGNED TO	START DATE	DUE DATE	DURATION	% DONE	DESCRIPTION	PRIORITY	SPRINT/MILESTONE
Gather Requirement		2/12/2019	2/13/2019	1				Planning
System/Architecture Design		2/17/2019	2/24/2019	7				Design
Define Scope		2/25/2019	3/4/2019	7				Design
Define Edge Case		3/5/2019	3/18/2019	13				Design
Define Test Case		3/5/2019	3/18/2019	13				Design
Web Frontend UI Design		3/25/2019	5/5/2019	41				Design
Backend API Design		3/25/2019	5/5/2019	41				Design
Desktop Application UI Design		3/25/2019	5/5/2019	41				Design
Database/File System Design		3/25/2019	5/5/2019	41				Design
Web Interface Setup		8/20/2019	9/9/2019	20				Development
Database Development		8/20/2019	9/9/2019	20				Development
Server Backend Development		8/20/2019	9/9/2019	20				Development
Front and Backend Connectivity		9/10/2019	9/26/2019	16				Development
Desktop Application Extension		9/27/2019	10/11/2019	14				Development
Desktop Application Connectivity		10/13/2019	10/27/2019	14				Development
Documentation		10/28/2019	11/11/2019	14				Development
Functional Testing		11/12/2019	11/26/2019	14				Testing
Non-Functional Testing		11/26/2019	12/10/2019	14				Testing

System Design

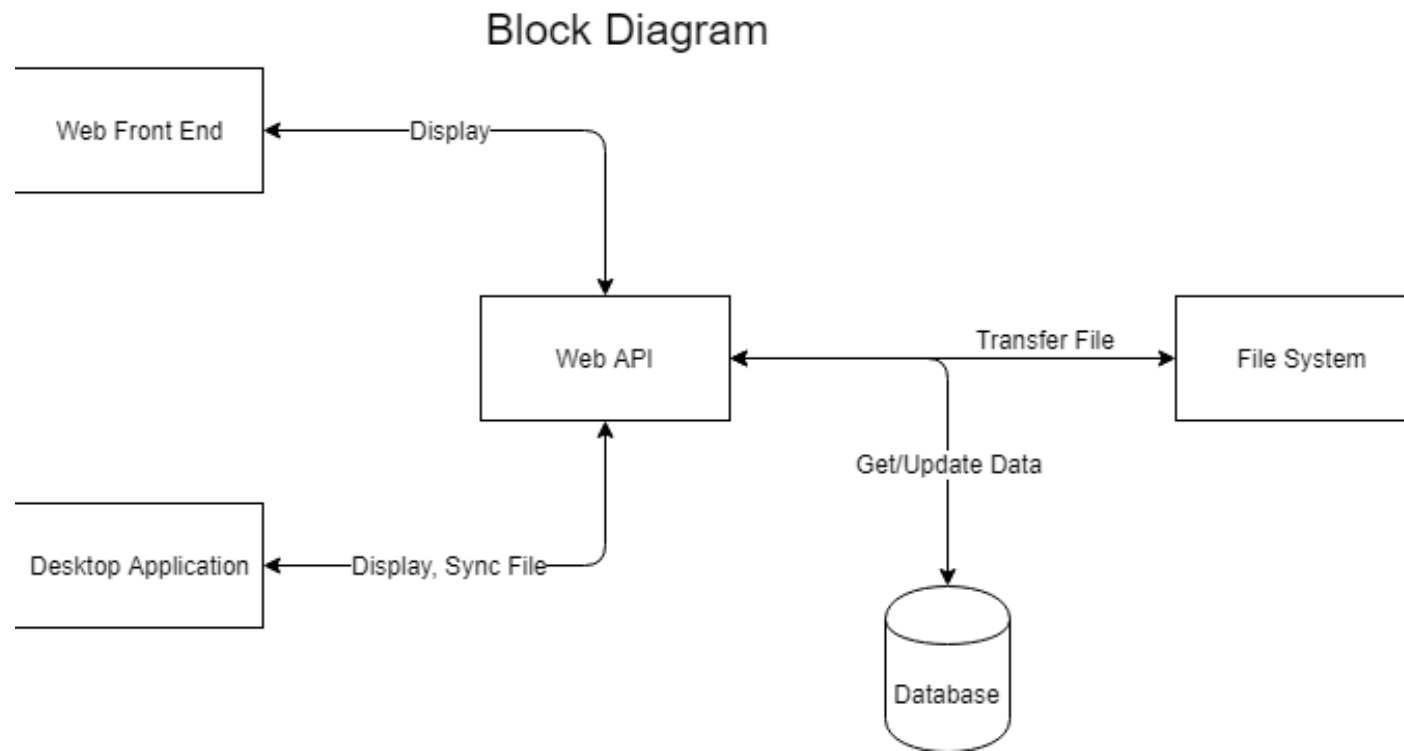
System Design

- ▶ **Functional Decomposition**

- ▶ **User signs into web application**
- ▶ **User can view/download/upload files**
- ▶ **User can access the same information on the desktop application**

System Design

► Detailed Design - Functional Modules Design



System Design

- ▶ **Detailed Design - Interface Definition**
- ▶ **User Interface:**
 - ▶ Web page that is built on React.js
- ▶ **Communication Interface:**
 - ▶ Http Post/Get Request

System Design

- ▶ **Detailed Design - User Interfaces**
 - ▶ **Home Page**
 - ▶ Composed of many React components
 - ▶ **Profile Page**
 - ▶ Basic Info
 - ▶ **Admin Panel**
 - ▶ Able to create new code for new user
 - ▶ Disable user account
 - ▶ Set permission

System Design

- ▶ **Software Platforms**
 - ▶ **React for web UI**
 - ▶ **C# for backend services and web API**
 - ▶ **Microsoft SQL Server as database.**

System Design

- ▶ **Test Plan**
 - ▶ **Unit Testing: Jest, Postman**
 - ▶ **Integration Testing: Jest**
 - ▶ **System Testing: Jest**
 - ▶ **Acceptance Testing: Buildertrend feedback**
 - ▶ **Compatibility Testing**
 - ▶ **Performance Testing**

System Design

▶ Prototype Implementations

<http://sddec19-11.sd.ece.iastate.edu/resource/Demo.mp4>

Conclusion

- ▶ **Project Status**
 - ▶ **Basic functional requirement satisfied**
 - ▶ **Database setup**
 - ▶ **Most designs are complete (Web UI, API, Database).**

Conclusion

- ▶ **Task Responsibility/Contributions**
 - ▶ **Christopher Bui**
 - ▶ Developer, Meeting scribe
 - ▶ **Brian Chodur**
 - ▶ Front-end developer, UI Designer.
 - ▶ **Luke Stoll**
 - ▶ Report & Task Manager, Backend Developer
 - ▶ **Zhenyu Zhao**
 - ▶ Project Planner, Developer

Conclusion

▶ Next Semester Plan

- ▶ Expand the current API to meet all functional requirement.
- ▶ Extent desktop application to stay to sync with web application.
- ▶ Finish create the frontend components.

Questions