

## **System and Unit Test Report**

**Product: BackupBuddies**

**Team: Free Cloud Backups**

Common tasks:

JOINANETWORK:

- Start BackupBuddies
- In the "Peer IP" field type "planetguysandcats.io"
- In the "Password" field type "walrus"
- Click the "Join" button

Sprint 1:

As a user, I want an easy to use GUI for uploading and downloading files because I am technically challenged.

- Start BackupBuddies
- Check that a GUI appears

As a user, I want to create and join a network of trusted devices of my choosing, so I can store files on them

- JOINANETWORK
- event log shows if connection to the network succeeded or failed
- other users and files are shown in the app

As a user, I want to be able to list all devices in the network and see their status, So I can choose one to store a file on

- JOINANETWORK
- Check that the GUI shows a list of peers

As a user, I want to store and retrieve specific files on other devices, so that if my device fails, the files will not be lost.

- JOINANETWORK
- Click on a peer in the "peers" list
- Click the "upload a file" button
- Choose a test file from the testing system
- Check that the test file appears in the "files" list
- Click that file
- Click the "Download a file" button
- Choose a location other than the one where that test file is located
- Check that the uploaded file and the downloaded file have identical contents and names

As a user, I want to be notified if storing or retrieving files fails, so I don't count on

backups that are invalid.

- JOINANETWORK
- Click on a peer in the "peers" list
- Click the "upload a file" button
- Choose a very large file (1 GB?)
- Disconnect the testing computer from its Internet connection while the upload is in process
- Check that a message appears in the log stating that storing a file failed
- Close BackupBuddies
- JOINANETWORK
- Click a peer in the "peers" list
- Click the "upload a file" button
- Choose a very large file (1 GB?)
- Upload the file
- Click the file in the "files" list
- Click "Download the file"
- Choose a location Disconnect the testing computer from its Internet connection, while the upload is in process
- Check that a message appears in the log stating that retrieving a file failed

Sprint 2:

As a user, I want the program to remember my network, so I don't have to type it each time I want to run the program

- JOINANETWORK
- Wait at least 1 second
- Close BackupBuddies
- Open BackupBuddies
- Check that Backupbuddies attempts to reconnect to each peer that it was previously connected to

As a user, I want to be able to search for files across devices.

- JOINANETWORK
- Type in the search field
- The list of files should change and display only those files searched for

As a user, my files will be compressed automatically when I upload them so it doesn't waste storage space

- JOINANETWORK
- Upload a test file of size 10 GB, consisting of entirely zeroes
- Check on the test machine that the file size is less than 10 GB

As a user, I want to be able to specify and change how much storage space I am willing to share.

- JOINANETWORK

- Slide the bar to select how much storage you are willing to store
- The event log should display that the storage space has changed
- Upload multiple files to peers until your storage space is full
- Try uploading a file that will go over your limit, it should not work

As a user, I can choose which peers I upload files to, so that I don't overload one device

- JOINANETWORK with three computers
- Select a peer, and click upload
- On the receiving device, check to make sure you received the correct file
- On the last computer that was not selected make sure it did not receive this file

Display a log of network events to the user

- JOINANETWORK
- Upload a file
- The log should display if the upload failed or succeeded
- Download a file
- The log should display if the download failed or succeeded

Sprint 3:

As a user, I can encrypt my files when uploading them so that they can't be stolen.

- JOIN A NETWORK
- Enter personal encryption key into the field
- Click on confirm key
- Event log should display your newly changed key
- Click on a user and upload to them.
- Delete the file from your computer
- Change the encryption key
- Try to download the same file, you should receive an unreadable file
- Change the encryption key back to the original one
- Download the same file again and the user should receive the original file unaltered

As a user, I want to be able to recover all my files at once.

- JOIN A NETWORK
- Upload multiple files to multiple peers
- Close the program
- Delete the files off of the users computer
- Open the program and rejoin the network
- Search for your device name in the search bar
- Click select all for the files
- Click download
- You should receive all the files back unaltered

As a user, I want to be able to easily upload multiple files at once.

- JOIN A NETWORK
- Select a user
- Click on upload
- Navigate the the correct folder
- Shift or ctrl-click all files that you wish to upload
- Event log should display if uploading succeeded or failed
- Check on the receiving device if the files have uploaded correctly

As a user, I want to use an aesthetically pleasing application.

- JOIN A NETWORK
- Check that the GUI has three columns - one with controls, one with a peer list, and one with a file list
- Check that the GUI has the background colours as specified
- Check that the upload and download buttons fill the width of their column and are large enough to be immediately noticeable
- Check that beside each peer in the peer list is a green dot if the peer is online, or a red dot if the peer is offline
- Check that beside each file in the file list is a green dot if the file is stored by an online peer, or a red dot if the file is stored by no online peers