

# Product Backlog

VENote, Team 14

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## Problem Statement

Engineering notebooks are legal documents engineers use to settle patent disputes, onboard new engineers, and identify errors in the creation process. These documents are not digital and are therefore difficult to share, format, search, and backup. Our software will allow engineers to easily create digital engineering notebooks that can also be used as legal documents in court.

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## Background Information

### Problem details

Engineering notebooks are legal documents used primarily by engineers and are critical to settle patent disputes, inform engineers new to the project about the project, and identify error in the creation process.

### Domain

This product would be used in the engineering domain. All types of engineers (except software engineers) are expected to keep notebooks documenting their work.

### Targeted Users

The target user of this product is an engineer or a manager for an engineering company. Engineers will use it to keep track of their work and managers will use it to measure progress. It can also be turned over to lawyers in the case of a legal dispute to prove inventorship of a product.

### Similar Platforms and their Limitations

Currently, engineering notebooks made by using physical notebooks and pens in addition to following a strict set of rules. This makes the document reasonably secure against tampering and ensures it can be used as a legal document. Unfortunately, this option is also inordinately cumbersome to use and maintain. In less formal settings, websites and other digital mediums are used for convenience. However, programs such as OneNote and Evernote do not enforce the regulations required to ensure the documents are legally invalid. Our application would require signatures and co-signatures which are necessary to prove a notebook's validity. It would also prevent past entries from being deleted or modified, ensuring that the history of the project is intact for engineers and verifiable in court. These features will make our product easier to use for customers, as less research and work on their part would be necessary. In addition,

many of them are proprietary and only accessible through expensive computer-aided design (CAD) software, like PTC Mathcad or Autodesk Inventor. Our software will be a standalone service that is dedicated to creating better engineering notebooks, not simply an extra feature that is tacked onto an engineering design program. This is important because many disciplines that utilize engineering notebooks do not use CAD, and the options offered in CAD software suites are severely underdeveloped.

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## Requirements

### Functional

#### As a user, I would like to

1. Add text to the notebook
2. Comment on pages
3. As a user I would like an introductory tutorial
4. Make corrections in the proper format
5. Add images to the notebook
6. Sign pages
7. Caption pictures in the notebook
8. Use a paintbrush tool to add custom drawings to the notebook
9. Share a notebook through email.
10. Share a notebook through a link.
11. Share a notebook to another person without an account.
12. Know the number of pages
13. Know the timestamp of pages
14. Query all notebooks for a specific notebook
15. Query all notebooks for a specific timestamp - update on GH
16. Query all notebooks for specific text
17. Query a notebook for a specific page
18. Query a notebook for specific text
19. Query a page for specific text
20. Create notebook groups
21. Share a notebook
22. Give feedback to developers
23. Upload general files to the notebooks
24. Upload STL to the notebooks if time allows
25. Upload FBX to the notebooks if time allows
26. Export notebooks as PDFs containing 3D-viewers
27. Tag notebook pages
28. Export notebooks as PDF
29. Sign notebook pages
30. Back up a notebook to a secondary storage location - update on GH

31. Know why I can't edit previous pages
32. Access the notebook from the internet
33. Access the notebook offline if time allows
34. Choose what formatting and rules are applied to my page
35. Location to be logged and have the option to keep track of where I edit my pages from.

**As a manager, I would like to**

36. Prevent notebook tampering
37. View a group of user's notebooks
38. Co-sign notebook pages
39. Assign user permissions to other users
40. Submit a notebook for legal approval
41. Assign specific users access to certain notebooks
42. Handle a large number of users

**Non-Functional**

- Intuitive UI - it should be easier for customers to use our tool than it is for them to use existing tools
- Fast site loading times
- Handle large usage load
- Handle large number of users
- Developers use MySQL
- Developers maintain a secure database
- Developers create a maintainable database
- Developers alter the server through a centralized location