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| **Topic** | **Possible Effect of Constraint on Product** | **Solution** |
| Hardware and software platforms | * Sinatra platform only usable on web (not on mobile devices) | * Make page layout responsive using CSS grid, to minimise screen-size related issues for any future rollout * Add mobile rollout to list of suggested added features |
| Performance requirements | * App needs to deal with frequent use and frequent creation, viewing, update and deletion of data – Means that app cannot be too complicated as it will run too slowly | * Make database structure relatively simple and small, make pages simple and not too media-rich, make functions accessible with as few clicks as possible |
| Persistent storage and transactions | * Product is only hosted locally, with a local DB, meaning data does not persist across different devices | * Treat project as a prototype, to be deployed on web-hosting platforms if successful, with a cloud based DB. |
| Usability | * Project lacks the time and expertise to implement separate user accounts. Limits app’s usefulness in the real world, and prevents a web-hosted solution due to inherent security risks. | * Treat project as a prototype – user accounts a key feature to be added later, a pre-requisite for web-hosting the app. |
| Budgets | * No budget – Limits possible tools that can be used | * Use free tools such as Sinatra and git |
| Time | * Short timescale of 5 days – Limited functionality possible within this time | * Produce just a simple prototype, other possible features can be suggested but not implemented |