**Crib sheet of things to remember**

* ShowColumns helps reduce amount of data
* DropColumns can also be used to reduce data
* We should not repeat formulae everywhere, reference it instead
* Use global variables and local variables to store data locally
* Smile
* Sort first and then show columns outside
* Going between screens forces collections to be built
* Don’t rush, take your time when talking
* Two collections instead
* How to move from landing page to main edit page – build small collection
* Using patch and collection together to keep it updated
* When in the purple app, you can try and do ‘Save’ without code filled in
* And then show disabled
* Currently there is no formula in Power apps, to show that a function has been executed
* Use speed test to see the speed you’re at
* Google Chrome, /use Edge is recommended
* Up the DTU's to 20+
* Ensure your SQL db is properly indexed and optimized

A [Database Transaction Unit] is a blended measure of CPU, memory, and data I/O and transaction log I/O in a ratio determined by an OLTP benchmark workload designed to be typical of real-world OLTP workloads. Doubling the DTUs by increasing the performance level of a database equates to doubling the set of resource available to that

**Use Delayed Load**

Turn on the [experimental feature](https://docs.microsoft.com/en-us/powerapps/maker/canvas-apps/working-with-experimental) for Delayed Load if your app has more than 10 screens, no rules, and many controls that are on multiple screens and that are directly bound to the data source. If you build this type of app and don’t enable this feature, app performance may suffer because the controls in all screens must be populated even on screens that aren’t open. Also, all screens of the app must be updated whenever the data source changes, such as when the user adds a record.

Mention concurrency

Periodically republishing your apps The PowerApps product team is continually optimizing the Power platform. Sometimes, for backwards compatibility, these optimizations will apply only to apps that are published by using a certain version or later. Therefore, we recommend that you periodically republish your apps to take advantage of these optimizations.

1. From user perspective **Authenticates the user** - Prompts the user, if that person has never opened the app before, to sign in with credentials for whatever connections the app needs. If the same user opens the app again, that person might be prompted again, depending on the organization’s security policies.
2. **Gets metadata** - Retrieves metadata such as the version of the PowerApps platform on which the app runs and the sources from which it must retrieve data.
3. **Initializes the app** - Performs any tasks specified in the **OnStart** property.
4. **Renders screens** - Renders the first screen with controls that the app has populated with data. If the user opens other screens, the app renders them by using the same process.

**Avoid hard coding app content**

**Hide/show content rather than using multiple screens ;;**