# Enkadia Synexsis Walkthrough

### Topic: Error handling

### Notes:

* Many out-of-scope issues came out during testing process
* Project is an SDK for AV users, not programmers
* User wants a specific model for their projector, etc
* If a user has two different bits of hardware, they need a DLL file for each component
* Hardware and software components are extremely different
* Hardware controlled from a Raspberry Pi
* Licenses for the SDK distributed to only those who purchase it
* Simple commands for end user
* Testing
  + Use of Integration and unit tests
  + Unit tests running on actual device so it talks to the components

### Feedback Given:

* Good idea with a “modular” approach so DLL files are decoupled and not used as one massive framework in one extension
* Really focus on making SDK easy since it can be difficult creating an SDK for people that don’t know how to program
* Documentation is really important for a project like this, especially if you’re designing an SDK for non-programmers

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# Spreetail Walkthrough

### Topic: Hardware

### Notes:

* Take 360 degree images of a product and store them to a database as an automated process
* Scope for hardware is to receive commands, capture images, and send images to queue
* Components/Tools for development
  + Python for camera control
  + Cameras
  + Tripods
  + Lighting
  + Linux tower
* Using Gphoto2 as library to control cameras
  + Problems
    - Random autofocus time
    - Hard to get photos for an exact rotation
* Problem encountered
  + High quality images with DSLR or fast processing speed with webcam

### Feedback Received:

1. Panoramic phone shots might be good
   1. Though, security reasons blocked camera use from external sources
2. Good idea to have a way to cancel the camera taking subprocesses
3. Error handle from subprocesses if possible/necessary
4. The Sponsor wants a higher quality picture. Camera must write to the SD card before the next picture can be taken. Why not use a phone camera?
   1. You can also buy camera accessories that latch onto the phone and use that said camera’s software to take pictures.
   2. This can save you from writing to the SD card and instead save to a server directly
   3. Potentially save a lot of time in your capturing process
   4. You can also see the pictures while it’s taking it; easier error detection

### Post Walkthrough

1. We have looked into using phones and accessories for the capture process, and we plan on continuing with the use of DSLR cameras
2. We have added the cancel process to our backlog, and this feature is currently in development.
3. We are looking into splitting up captures into separate capture commands to enable us to error handle more easily. This will allow us to find errors for specific photo captures rather than waiting until the end of the capture process to find an error.
4. As we said in number 1, we have decided to stick with using DSLR Cameras. The quality for using DSLR compared to Phone is a huge difference.