**Synopsis**

The purpose of this project is to create a new high margin print solution that can be deployed to existing Kodak kiosks. This product is a collage creation application where a consumer can quickly and easily create professional looking collages using nothing more than their fingertips on a touchscreen kiosk. A consumer will be able to simply load their photos into the kiosk then crop, feather, rotate, resize, and position all of their favorite photos into a collage. Once the consumer is satisfied with their masterpiece, it can be printed just as easily as it was created.

**Process**

- **Modified Waterfall**
  - Waterfall fit best with the time constraints.
  - Weekly meetings with the sponsor provided constant feedback.
  - Three phased releases helped to get the user interface to meet the sponsor's expectations.

- **Risk Management**
  - Two teams were formed for the design phase.
  - The split reduced risks involved in getting enough done under strict time constraints.
  - Many prototypes for difficult and unclear features.

**Design Highlights**

- **Point Collection**
  - Foundation of the image outlining and cropping algorithms.
  - Allows for dynamic point translation and figure resizing.
  - Can crop any shape and computes clipping panes.

- **Rendering Pipeline**
  - The rendering pipeline had to be balanced between quality and efficiency.
  - Scaling first means less pixels to handle for later transforms.
  - Feathering last prevents the effect from losing quality through other transforms.

**Outcomes**

- **Features**
  - Image edge feathering
  - Image rotation control
  - Image resizing control
  - Image placement control
  - Freeform cropping
  - Rectangular cropping
  - Elliptical cropping
  - Heart shaped cropping
  - Touchscreen-friendly user interface
  - Easy printing process
  - Undo functionality
  - Localization support
  - On-Screen Help
  - Administrative controls