Mines Field Session 2013

Disney Create produces web and mobile applications that allow kids to express themselves by drawing pictures, making photo collages and creating animations in a safe environment. Traditionally, interactivity at this level has required Flash on the desktop and native apps on the mobile platform. As more kids use tablets as their primary gateway to the web, we are facing a watershed moment where the split between 'the web' and 'applications' disappears.

The field session will investigate what is possible using todays JavaScript/HTML5 technology for one focused application – making photo collages. Photo collages are like scrapbook pages – curated (and therefore safe) assets can be arranged into a mashup to give a new image. For example, a background image can be selected, characters added to this background, and then annotated with speech bubbles using custom text.

The application will do all of this using no 'special' device specific technology, with the aim to have the same interactive experience on an iPad as on a Kindle Fire as on the web.

A successful project will have the following attributes

- The ability to select different backgrounds
- The ability to add characters with transparencies to that background
- The concept of depth and reordering layers
- A slick way to resize and rotate these characters that works across the platforms
- The ability to annotate the images with overlays like text
- The ability to persist and recover projects to a supplied storage service
- A way to separate the original asset sets to allow the application to be re-skinned: for example, use the same technology that powers an "Oz" mashup to power a "Star Wars" mashup just by changing the image assets
- Incorporates the lessons learned in our touch-specific mobile apps

Students will work on-site alongside our engineers and producers using the same tools and methodologies. For example, we use an agile development process with standup meetings and a 2 week sprint cycle. Students will be expected to put together and monitor their own manifests, and report progress and roadblocks to the engineering and production teams. We have an upload service that can be used to persist and recover data, so the project is primarily focused on the interactive parts of the application. We use Git for source control, Mantis for bug tracking, and a test driven design methodology.

Finally, this is not an artificial project.  We have a real need for this technology, and a correctly engineered and documented solution could see itself realized into a shipping product very quickly.