

MICHIGAN STATE
UNIVERSITY

Project Plan

Snagit Power Tools

The Capstone Experience

Team TechSmith

Ben Blaut

Kyle Gosen

David Markachev

Department of Computer Science and Engineering
Michigan State University

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From Students...
...to Professionals

Project Overview

- Show off the capabilities and ease of use of the Snagit COM SDK.
- This is done through the creation of a variety of applications that use the SDK.
- Up to five different applications ranging in functionality.
 - Screen Recording DVR
 - Macro Recorder
 - Social Image Stream
 - Map Maker
 - Research Capture



Functional Specifications

- Screen Recording DVR Tool
 - Able to schedule times for screen captures.
 - Support a view to see scheduled captures and recorded content and editing of content.
 - Interval Recording
- Macro Recorder
 - Support recording of user interactions and store as a macro with capture of video/image/text.
 - Support naming/deleting/invoking of recorded macros.



Functional Specifications

- Map Maker Capture Tool
 - Embed Google Maps web app service view.
 - Be able to capture all or part of the map view with option to save or send to editor.
- Social Image Stream Tool
 - Support configuring social network login info.
 - Support viewing most recent photo/image from social networks.
 - Option to quickly edit images.
- Research Capture Tool
 - Support capturing and uploading to a Google Drive account.
 - Sending capture to particular folder/collection.



Design Specifications

- Screen Recording DVR Tool
 - User inputs time and type of recording (image/video), possibly opening programs such as browsers, and where to save recording.
 - User is able to view currently scheduled recording and edit/delete them.
 - User is able to view previously saved recordings.
 - Recording entries can be sorted.
 - Editing options include metadata and recording options (full screen, fixed region, etc.).



Design Specifications

- Macro Recorder
 - User initiates recording which will keep track of user interactions.
 - User can set a limit to the number of recorded interactions.
 - User can view previously recorded macros, invoke, rename, and delete them.

Design Specifications

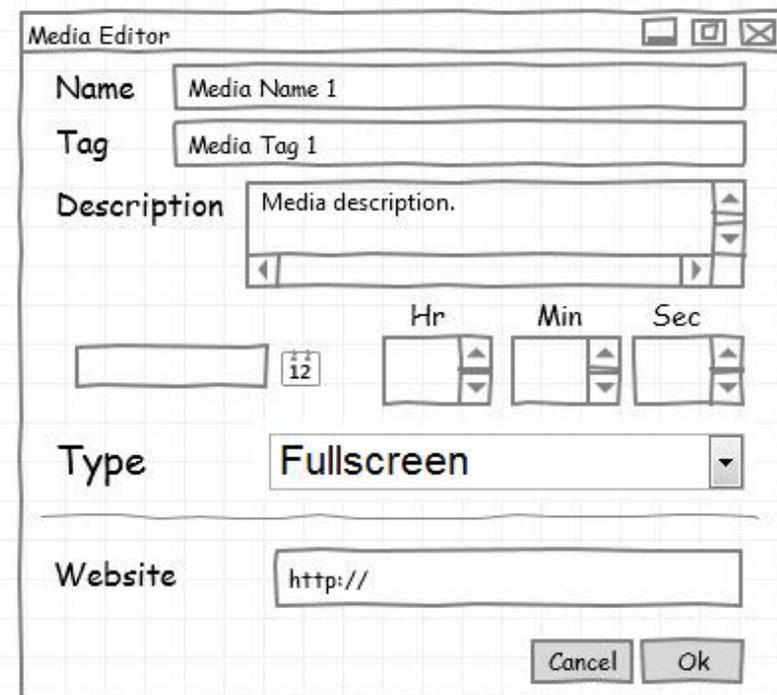
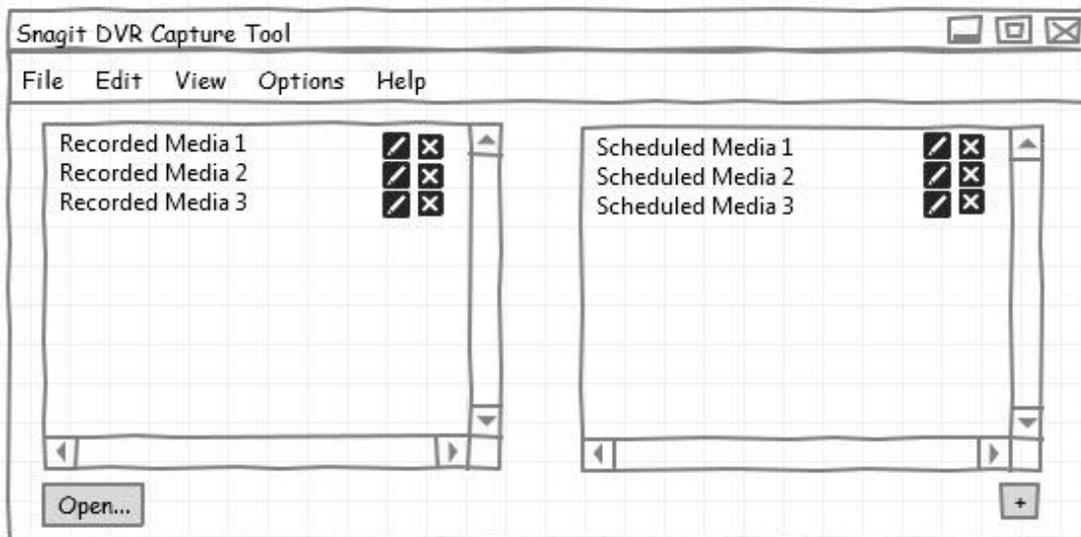
- Map Maker Capture Tool
 - User can see a map view in the app.
 - User can capture part or all of the map view, then save to disk or send to editor.
- Social Media Stream Tool
 - User can log in to social media websites such as Facebook or Twitter.
 - User can view recently uploaded images/photos in an aesthetically pleasing stream.
 - These images can be edited using Snagit.



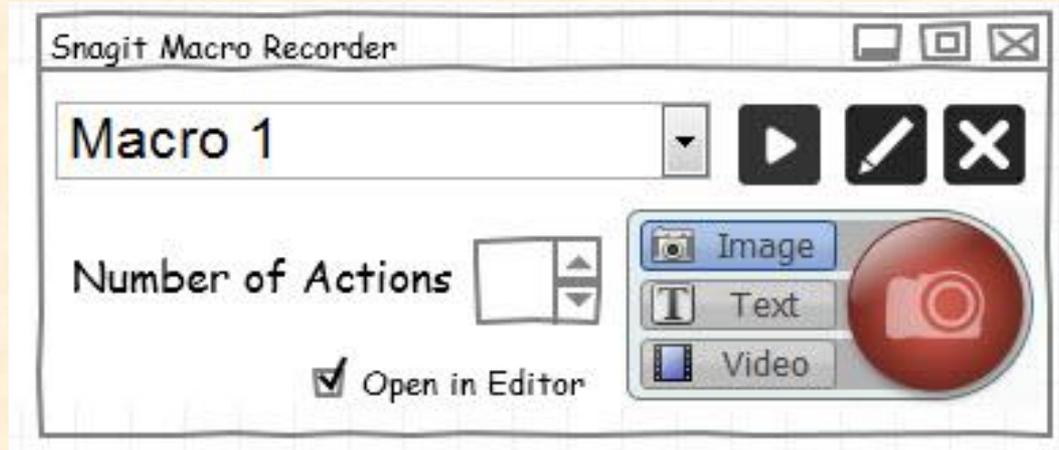
Design Specifications

- Research Capture Tool
 - User logs in to Google Drive account.
 - Can initiate a capture which will then be uploaded to Google Drive.
 - Supports output to specific folders/collections on Google Drive.

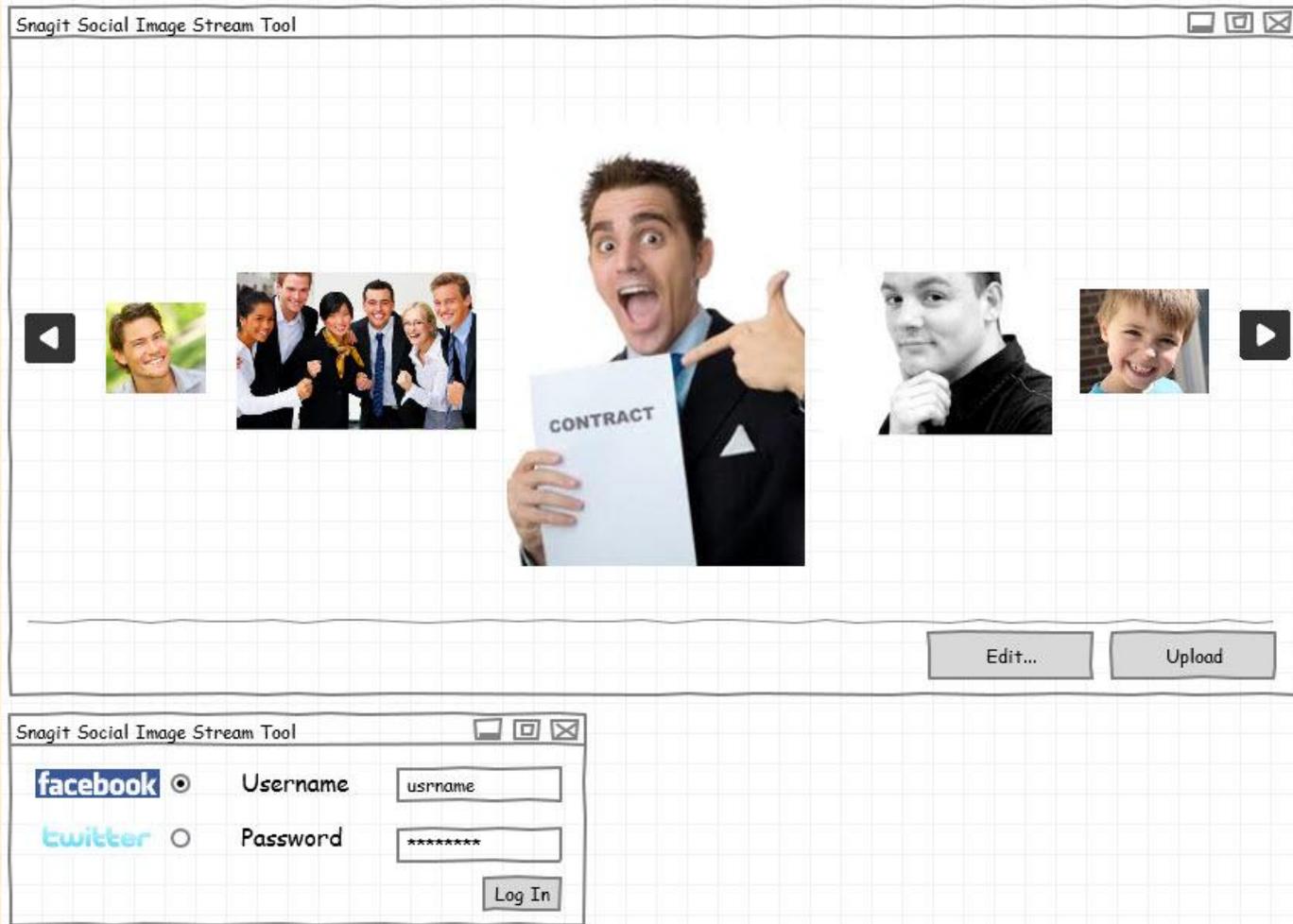
Screen Mockup: DVR Capture Tool



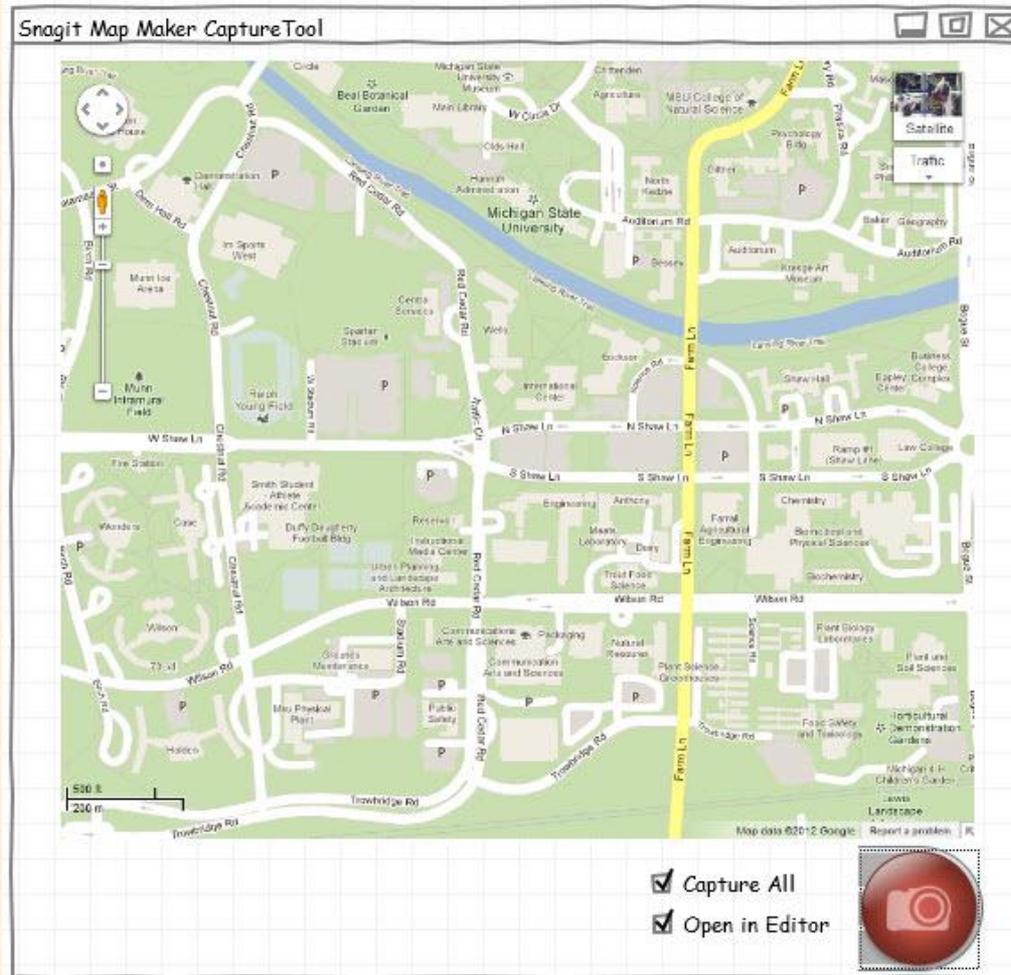
Screen Mockup: Macro Recorder



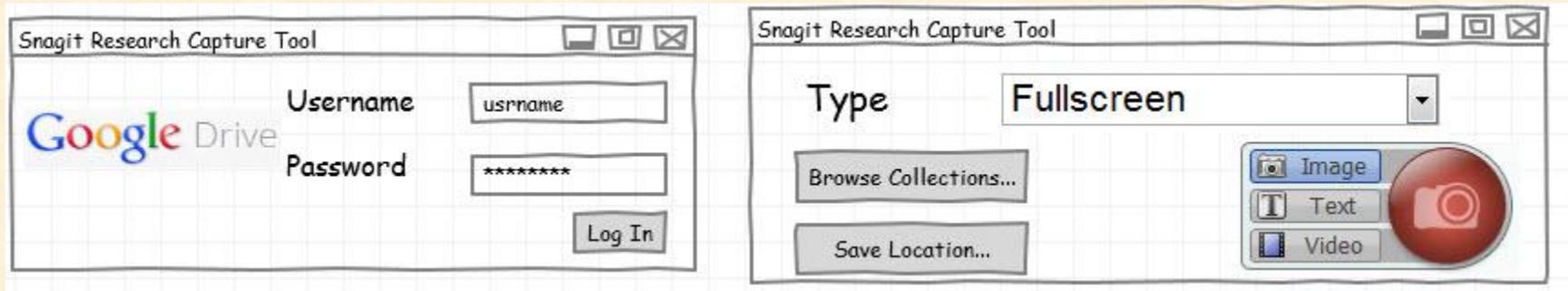
Screen Mockup: Social Image Stream



Screen Mockup: Map Maker Capture



Screen Mockup: Research Capture Tool

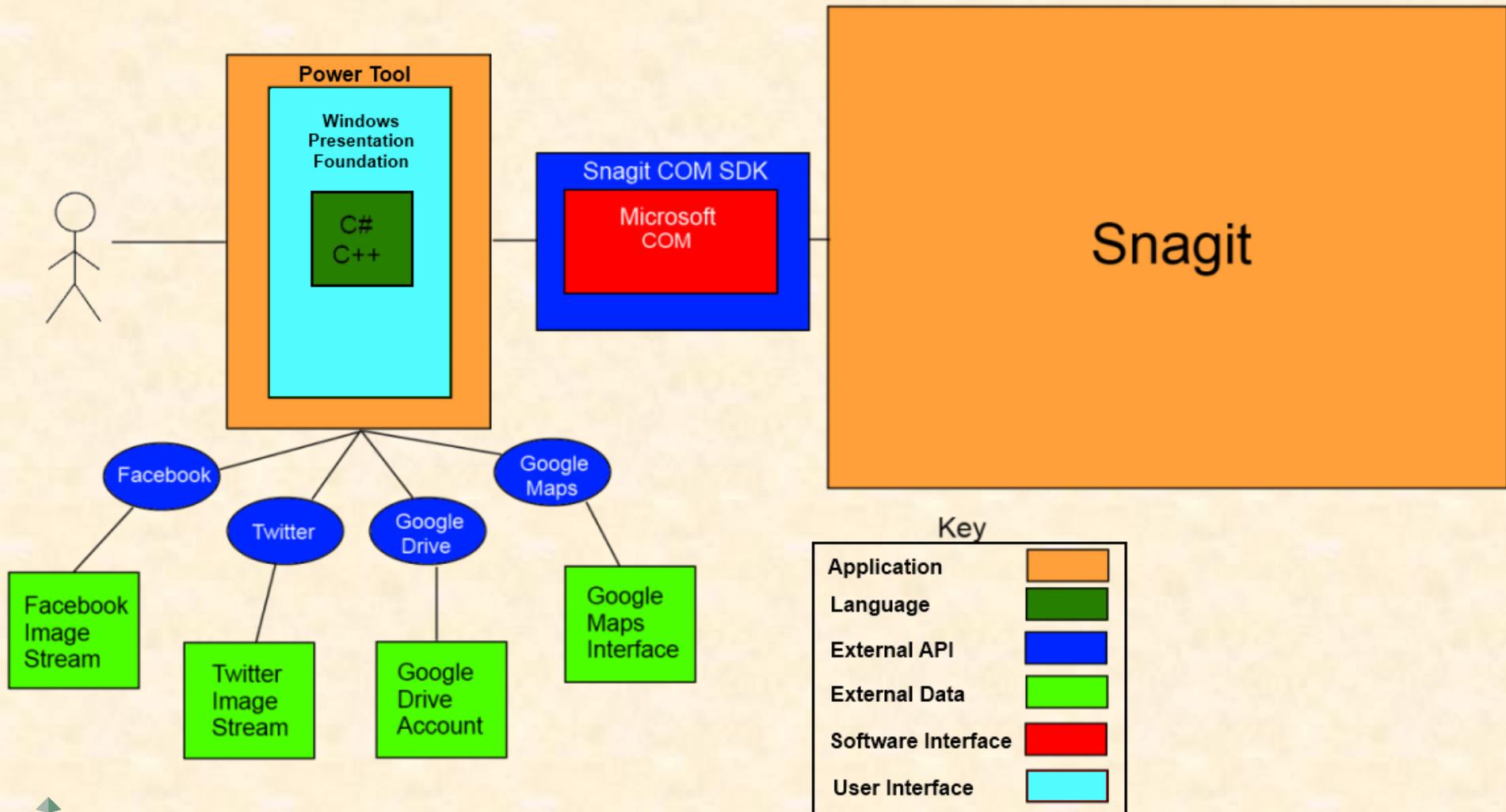


Technical Specifications

- Snagit will run as a COM server.
- Applications will communicate with Snagit using C#/C++ through COM.
- If Snagit is busy (editing image, capturing, etc.) the applications will not be able to communicate with it.
- Applications will use third party API's to get data sources.



System Architecture



System Components

- Hardware Platforms
 - Windows
- Software Platforms / Technologies
 - Visual Studio 2010
 - Windows COM
 - Snagit COM SDK
 - C# and C++
 - Facebook, Twitter, Google Maps, Google Drive APIs



Testing

- Functionality should be straightforward, therefore testing will be result-based.
- Version Control on TechSmith's GitHub in case of emergencies.
- Visual Studio informs coders of memory leaks.
- Have others use applications to test usability/functionality.



Risks

- Microsoft COM
 - Need to use COM to communicate with Snagit.
 - David has limited knowledge but is by no means an expert.
 - Snagit Documentation provides instructions/samples.
 - Microsoft also has sample COM applications.
- Snagit COM SDK
 - Documentation still in “beta” phase, we are the official “beta” testers.
 - We have no working knowledge of the SDK.
 - Whatever information is not available in the documentation should be available from our contacts.
- Third-Party API's
 - Facebook/Twitter/Google Maps API's.
 - We have not used these API's before.
 - In addition to learning them we will need developer licenses to use them, possibly provided by TechSmith.

