

**MICHIGAN STATE**  
**UNIVERSITY**

# Alpha Presentation

## Internal Telemetry For TechSmith

### Products

### The Capstone Experience

Team TechSmith

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*From Students...*  
*...to Professionals*

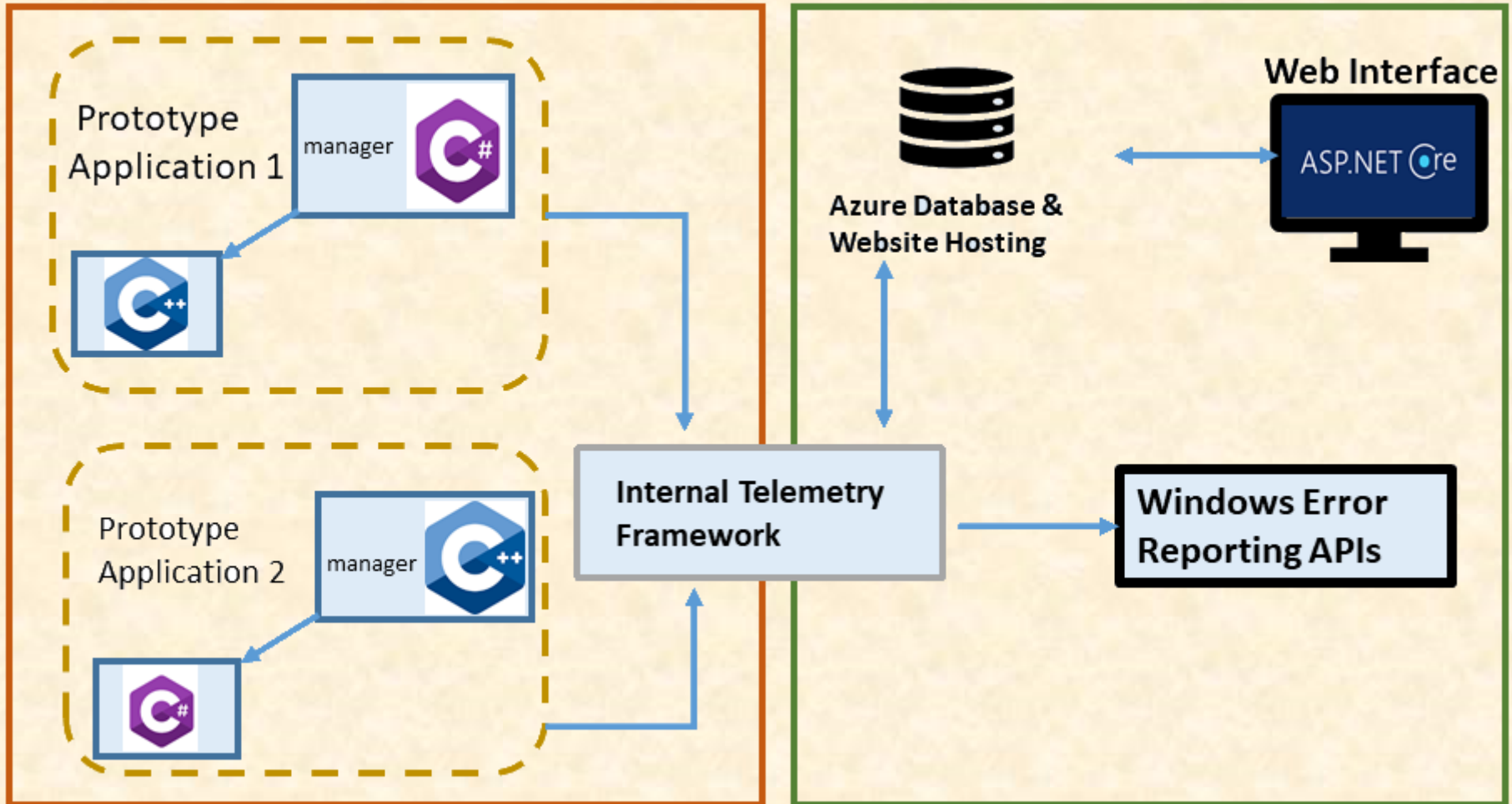
# Project Overview

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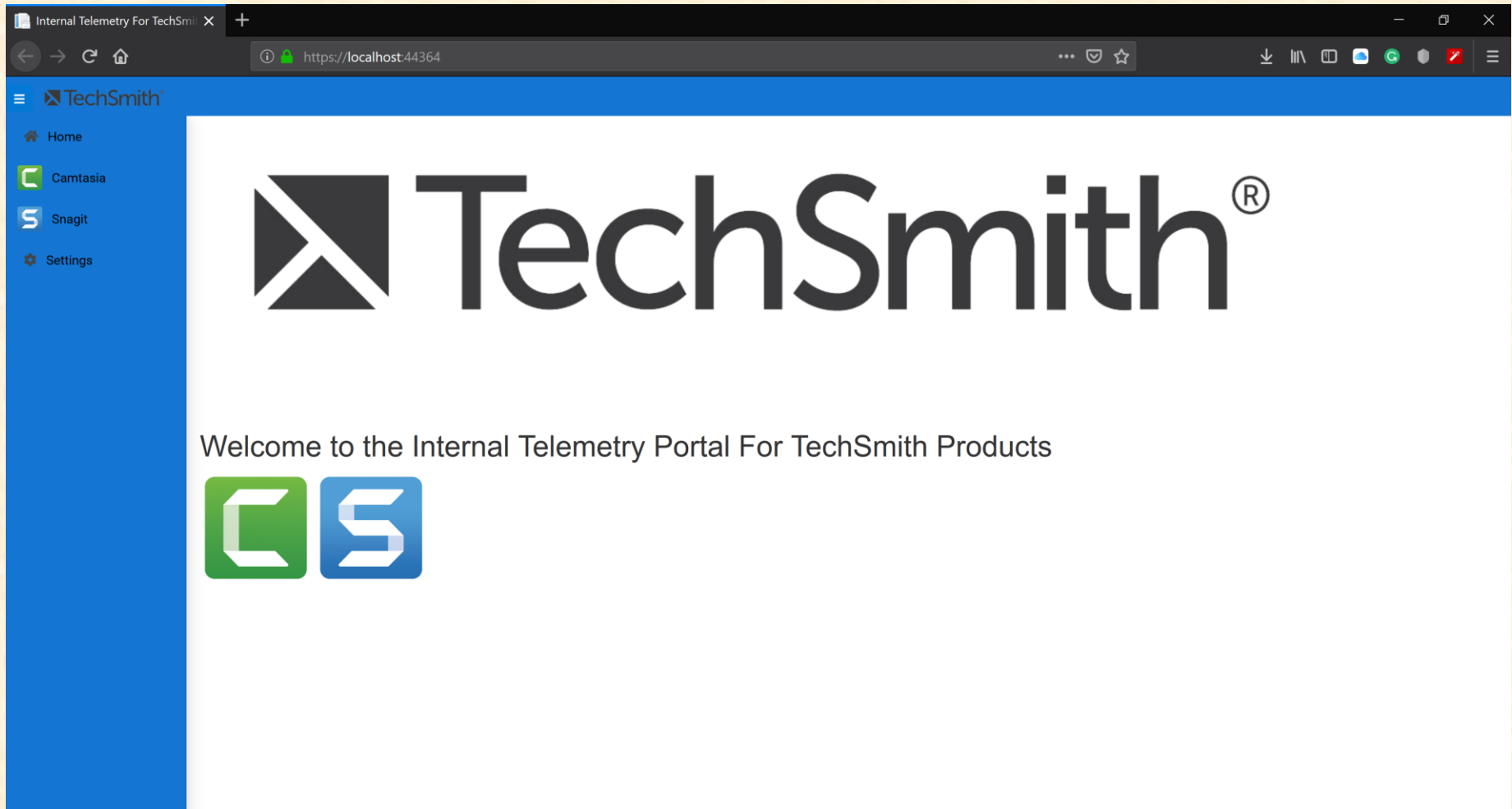
- Internal Telemetry Framework (ITF)
  - Dynamic-Link Library
  - WER registers this to run on application crash
  - Sends necessary information to database
  - Included in prototypes
- Web Portal
  - Products and versions
  - Report types



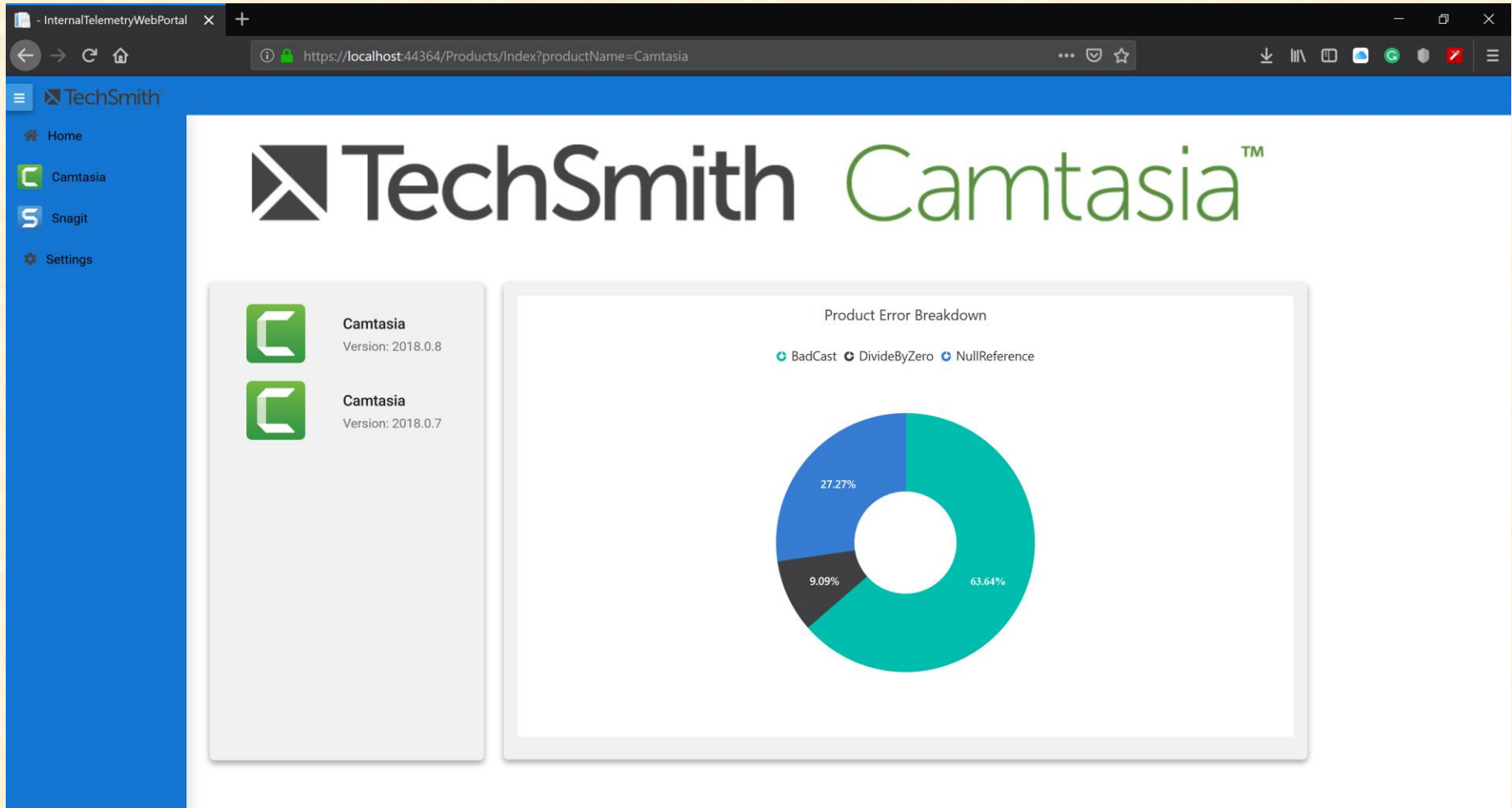
# System Architecture



# Home Screen



# Camtasia Product Screen



# Camtasia Product Screen

The screenshot displays the TechSmith Camtasia product interface. The browser address bar shows the URL <https://localhost:44364/Products/Details/1>. The page features the TechSmith logo and the product name 'Camtasia™' with the version '2018.0.8'. A left-hand navigation menu includes 'Home', 'Camtasia', 'Snagit', and 'Settings'. The main content area is divided into several sections:

- Error Log:** A list of four error entries, each with a red 'X' icon. The entries are:
  - NullReference**: User: Ryan, 2/2/2017 12:00:00 AM
  - DivideByZero**: User: Ben, 2/3/2017 12:00:00 AM
  - NullReference**: User: Ryan, 6/7/2018 12:00:00 AM
  - NullReference**: User: Ben, 8/9/2018 12:00:00 AM
- Errors Over Time:** A line graph showing the frequency of errors from 2017 to 2019. The Y-axis represents the number of errors (1-8). The X-axis shows years. Three data series are plotted: BadCast (green), DivideByZero (black), and NullReference (blue). The graph shows a significant increase in errors starting in 2019.
- Error Details:** A section for the selected error, showing:
  - User Name: Ryan
  - Error Type: NullReference
  - Date of Error: Thu Feb 02 2017 00:00:00 GMT-0500 (Eastern Standard Time)
- Diagnostic Tools:** A section with links for 'WINDOWS ERROR REPORT', 'DUMP FILE', and 'HARDWARE INFORMATION'. A 'Download Windows Error Report' button is also present.

# Camtasia Details With Download

InternalTelemetryWebPortal x +  
https://localhost:44364/Products/Details/1

TechSmith  
Home  
Camtasia  
Snagit  
Settings

**TechSmith Camtasia™**  
Version: 2018.0.8

Errors Over Time

2017 2017 2017 2018 2018 2018 2019

◆ BadCast ◆ DivideByZero ◆ NullReference

**WINDOWS ERROR REPORT** DUMP FILE HARDWARE INFORMATION  
Download Windows Error Report

User Name: Ryan  
Error Type: NullReference  
Date of Error: Thu Feb 02 2017 00:00:00 GMT-0500 (Eastern Standard Time)

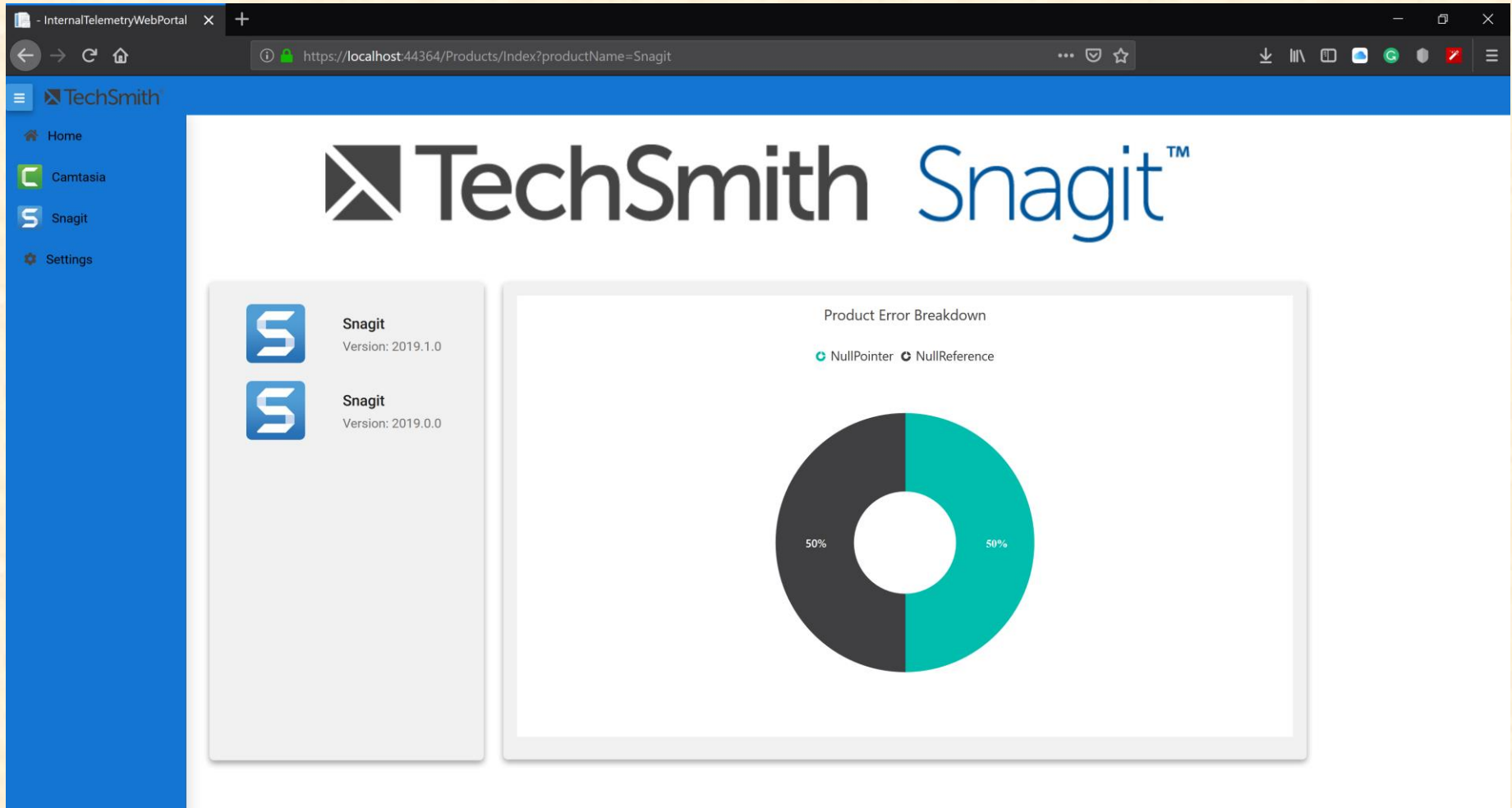
**NullReference**  
User: Ryan  
6/7/2018 12:00:00 AM

**NullReference**  
User: Ben  
8/9/2018 12:00:00 AM

Opening Report.wer  
You have chosen to open:  
 Report.wer  
which is: wer File (19.8 KB)  
from: https://localhost:44364  
What should Firefox do with this file?  
 Open with Browse...  
 Save File  
 Do this automatically for files like this from now on.  
OK Cancel



# Snagit Product Screen





# Snagit Details Screen

The screenshot displays the TechSmith Snagit interface. The browser address bar shows the URL `https://localhost:44364/Products/Details/3`. The page header includes the TechSmith logo, the product name "Snagit™", and the version "2019.1.0". A left-hand navigation menu contains links for Home, Camtasia, Snagit, and Settings. The main content area features two error log entries, each with a red 'X' icon:

- NullReference**  
User: Ryan  
5/6/2017 12:00:00 AM
- NullPointer**  
User: Z  
10/11/2018 12:00:00 AM

Below the logs is a line graph titled "Errors Over Time". The x-axis represents years from 2017 to 2018, and the y-axis represents the number of errors (0 to 2). A legend indicates that blue diamonds represent "NullPointer" and black diamonds represent "NullReference". The graph shows one "NullPointer" error in late 2018 and one "NullReference" error in early 2017.

At the bottom, there are two summary panels. The left panel displays error details:

- User Name: Ryan
- Error Type: NullReference
- Date of Error: Sat May 06 2017 00:00:00 GMT-0400 (Eastern Daylight Time)

The right panel provides options for further investigation:

- WINDOWS ERROR REPORT** (highlighted in red)
- DUMP FILE
- HARDWARE INFORMATION
- [Download Windows Error Report](#)

# What's left to do?

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- Input ITF into prototypes
- ITF pushes crash dump and DxDiag file to Azure
- Automatically set registry keys
- Notification system (stretch goal)
- Search and resolve on web portal



# Questions?

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