

**MICHIGAN STATE**  

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**UNIVERSITY**

# Beta Presentation

## Electronic Data Interchange (EDI) Monitoring

### The Capstone Experience

Team Stryker

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

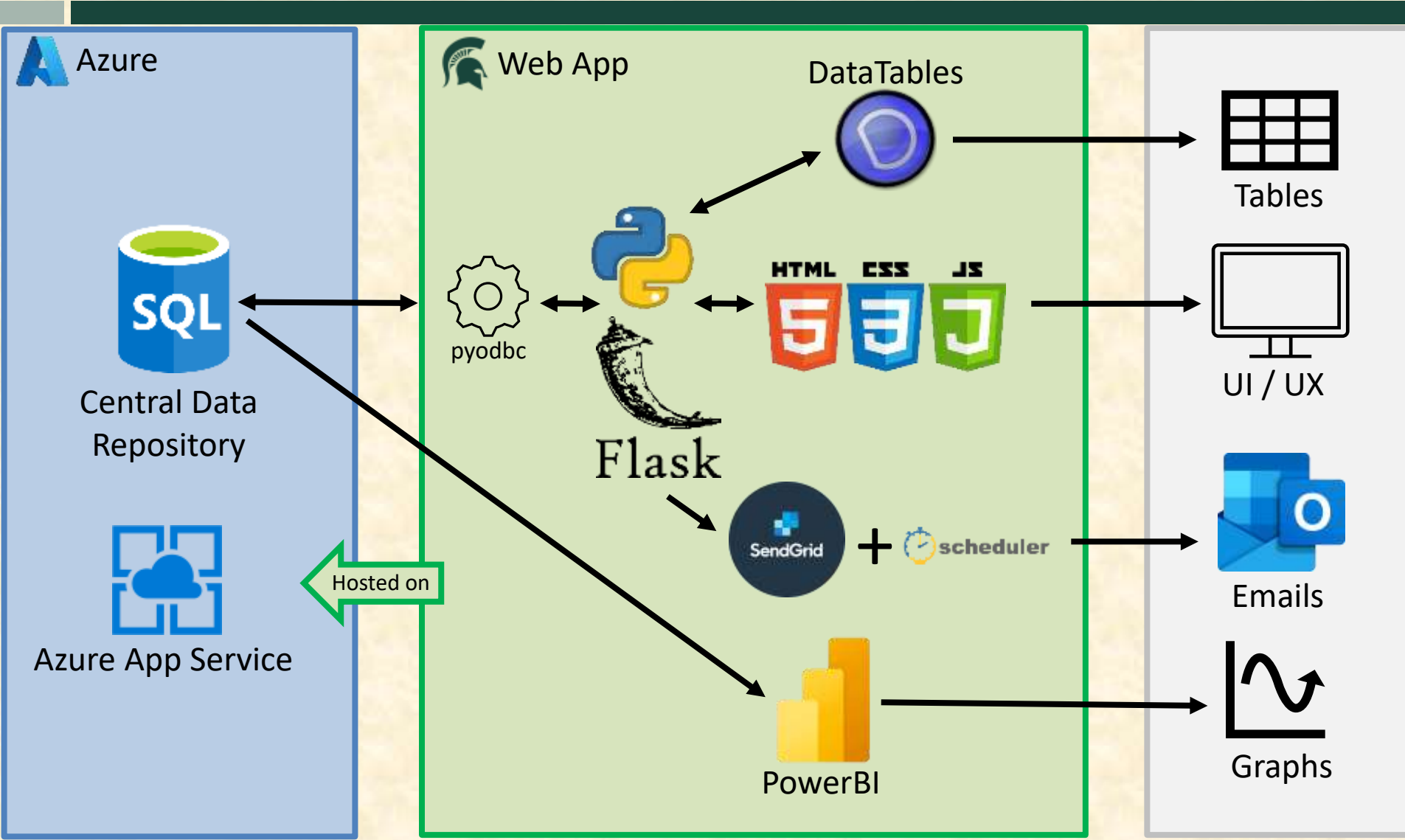
# Project Overview

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- Unify Dashboard Display of Data Across Various Middleware Solutions
- Implement Analytical Features for Close Scrutiny of Transactional Metrics
- Enable Scheduled and Customizable Reporting
- **→ To Assist Stryker's Integration Services Team as Transactional Data Grows**



# System Architecture



# Search Page

**stryker** EDI Monitoring Dashboard

**Search**

Event Type:  Start Date:  Sender:   
Purchase Order:  End Date:  Receiver:

[Add a filter block +](#) [Apply Filters](#)

[Copy Page](#) [CSV](#) [Export](#)

| Event Type            | Component Name        | GUID                              | Flow ID | Tech Stack | Date Time                     | Sender Identifier | Receiver Identifier | Purchase Order Number |
|-----------------------|-----------------------|-----------------------------------|---------|------------|-------------------------------|-------------------|---------------------|-----------------------|
| PurchaseOrderAckEvent | EdiX124010PoAckTarget | 2d333996343537303731943130943234  | 309803  | OSS B2B    | Tue, 24 Oct 2023 15:51:51 GMT | SYKCMF            | GHX                 | 0000832572            |
| PurchaseOrderAckEvent | EdiX124010PoAckTarget | 38363938363939323931323331373638  | 309802  | OSS B2B    | Tue, 24 Oct 2023 15:51:51 GMT | SYKMED            | GHX                 | 7121105A              |
| PurchaseOrderAckEvent | SapEccO2CPoAckSource  | 2d363236343139343231393831313736  | 316404  | OSS B2B    | Tue, 24 Oct 2023 15:51:51 GMT | SYKINS            | GHX                 | 454456                |
| PurchaseOrderAckEvent | SapEccO2CPoAckSource  | 37343432333932333935323236393936  | 316403  | OSS B2B    | Tue, 24 Oct 2023 15:51:51 GMT | SYKINS            | GHX                 | 0210-378860001        |
| PurchaseOrderAckEvent | SapEccO2CPoAckSource  | 353634363537353730303333833333535 | 316402  | OSS B2B    | Tue, 24 Oct 2023 15:51:51 GMT | SYKMED            | GHX                 | P0020000230698        |
| PurchaseOrderEvent    | EdiX124010PoSource    | 2d373400393133383233393831363835  | 316401  | OSS B2B    | Tue, 24 Oct 2023 15:51:50 GMT | GHX               | SYKENDO             | 51601929815           |
| PurchaseOrderEvent    | EdiX124010PoSource    | 33333517303032373935333838373337  | 316400  | OSS B2B    | Tue, 24 Oct 2023 15:51:50 GMT | GHX               | SYKNVC              | U2875162-24           |
| PurchaseOrderEvent    | EdiX124010PoSource    | 2d383631323332333230303035313433  | 316399  | OSS B2B    | Tue, 24 Oct 2023 15:51:50 GMT | GHX               | SYKORIM2            | P000631293            |
| PurchaseOrderEvent    | EdiX124010PoSource    | 38383030333732383532393839303632  | 316398  | OSS B2B    | Tue, 24 Oct 2023 15:51:50 GMT | GHX               | SYKINS              | P240007234            |
| PurchaseOrderEvent    | SapEccO2CPoTarget     | 34343139353737373731313232393230  | 316395  | OSS B2B    | Tue, 24 Oct 2023 15:51:48 GMT | GHX               | SYKINS              | 0002394954            |



# Search Page - Filtered

**stryker** EDI Monitoring Dashboard

**Search**

Event Type:  Start Date:  Sender:

Purchase Order:  End Date:  Receiver:

All of this:

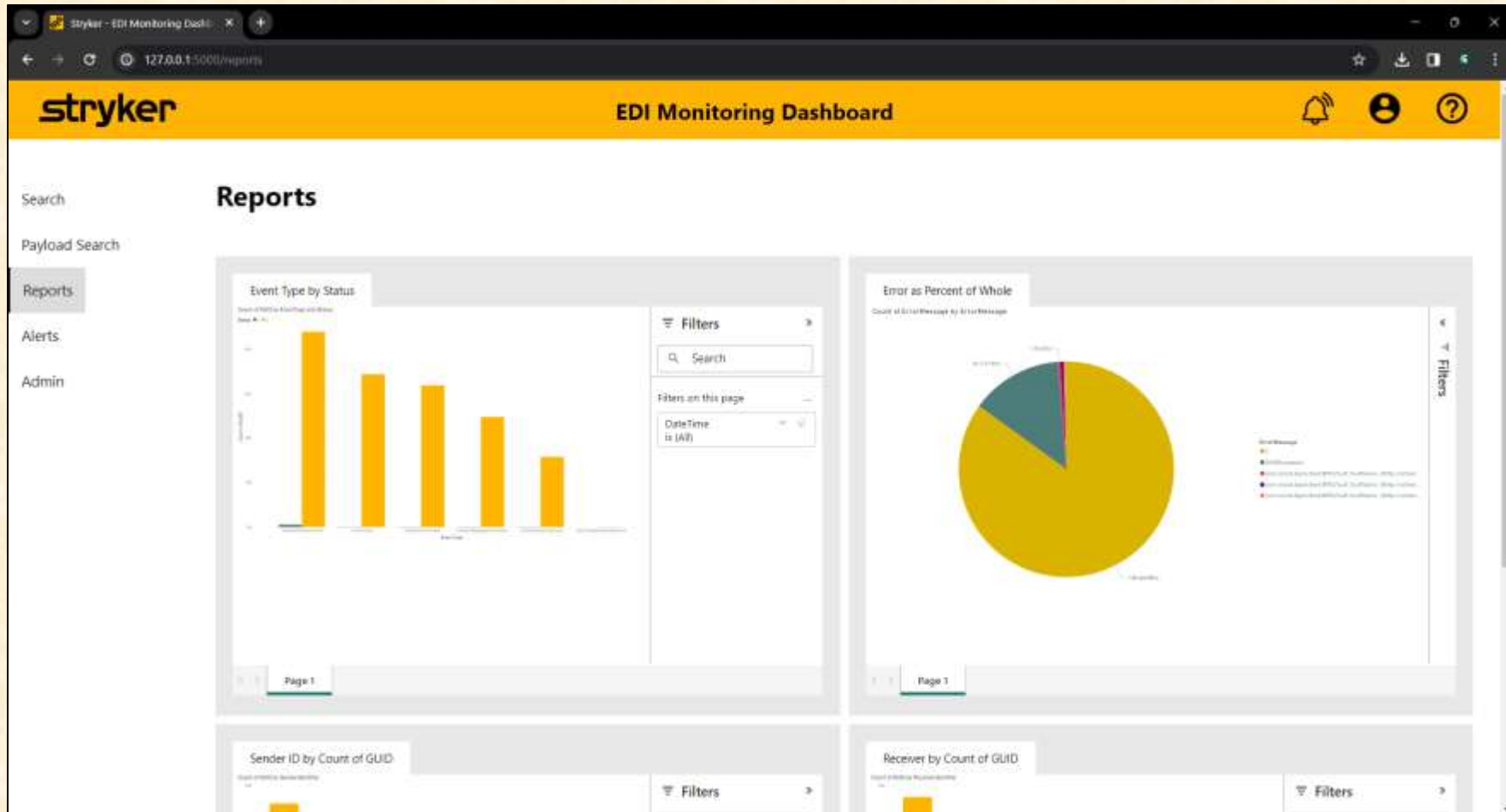
or

Or all of this:

| Event Type            | Component Name        | GUID                              | Flow ID | Tech Stack | Date Time                     | Sender Identifier | Receiver Identifier | Purchase Order Number |
|-----------------------|-----------------------|-----------------------------------|---------|------------|-------------------------------|-------------------|---------------------|-----------------------|
| PurchaseOrderAckEvent | Ed0X124010PoAckTarget | 243339936343537303731343130343234 | 309803  | OSS B2B    | Tue, 24 Oct 2023 15:51:51 GMT | SYKCMF            | GHX                 | 000832572             |
| PurchaseOrderAckEvent | Ed0X124010PoAckTarget | 38363938363939333931323331373638  | 309802  | OSS B2B    | Tue, 24 Oct 2023 15:51:51 GMT | SYKXED            | GHX                 | 7121105A              |



# Reports Page



# Alerts Page

The screenshot shows the Stryker EDI Monitoring Dashboard. The page title is "Alerts" and there is a "Create+" button. A table lists all alerts with the following data:

| Name           | Alert Type                           | Schedule   | Email                   | Status |
|----------------|--------------------------------------|------------|-------------------------|--------|
| Monthly Demo   | All Failed Transactions              | Monthly    | ravi.grewal@stryker.com | ACTIVE |
| Hourly Demo    | Failed Invoice Events                | Hourly     | ravi.grewal@stryker.com | ACTIVE |
| Weekly Demo    | Errors per Component                 | Weekly     | ravi.grewal@stryker.com | ACTIVE |
| Half Hour Demo | Failed Transactions in Last 24 Hours | 30 minutes | ravi.grewal@stryker.com | ACTIVE |



# Admin Panel – Search Config

The screenshot shows the Stryker EDI Monitoring Dashboard Admin panel. The page title is "Admin" and the main heading is "Search Columns Configuration". There are two tables side-by-side, each with columns for "Column Name", "Displayed Columns", and "Filter Options". The left table lists various EDI fields, and the right table lists attribute fields. A "Confirm" button is located at the bottom right of the configuration area.

**Search Columns Configuration (Left Table)**

| Column Name         | Displayed Columns                   | Filter Options                      |
|---------------------|-------------------------------------|-------------------------------------|
| EventType           | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| ComponentName       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| GUID                | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| FlowId              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| TechStack           | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| DateTime            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| SenderIdIdentifier  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| ReceiverIdentifier  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| PurchaseOrderNumber | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| SalesOrderNumber    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| ASNNumber           | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| InvoiceNumber       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Status              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| ErrorMessage        | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

**Search Columns Configuration (Right Table)**

| Column Name       | Displayed Columns                   | Filter Options                      |
|-------------------|-------------------------------------|-------------------------------------|
| DVMResponse       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| fileName          | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| strAttribute1     | <input type="checkbox"/>            | <input type="checkbox"/>            |
| strAttribute2     | <input type="checkbox"/>            | <input type="checkbox"/>            |
| strAttribute3     | <input type="checkbox"/>            | <input type="checkbox"/>            |
| intAttribute1     | <input type="checkbox"/>            | <input type="checkbox"/>            |
| intAttribute2     | <input type="checkbox"/>            | <input type="checkbox"/>            |
| intAttribute3     | <input type="checkbox"/>            | <input type="checkbox"/>            |
| floatAttribute1   | <input type="checkbox"/>            | <input type="checkbox"/>            |
| floatAttribute2   | <input type="checkbox"/>            | <input type="checkbox"/>            |
| floatAttribute3   | <input type="checkbox"/>            | <input type="checkbox"/>            |
| booleanAttribute1 | <input type="checkbox"/>            | <input type="checkbox"/>            |
| booleanAttribute2 | <input type="checkbox"/>            | <input type="checkbox"/>            |
| booleanAttribute3 | <input type="checkbox"/>            | <input type="checkbox"/>            |





# Admin Panel – Alert Presets

The screenshot shows the Stryker EDI Monitoring Dashboard Admin Panel. The page title is "Admin" and the main heading is "Alerts Presets Configuration". There is a "Create" button in the top right corner of the configuration area. The main content is a table with the following columns: Preset ID, Alert Type Name, Associated Query, Status, and Actions. The table contains 10 rows of alert presets, each with a unique ID, a name, a SQL query, and an "Active" status. Each row has an "Edit" button in the Actions column.

| Preset ID | Alert Type Name                      | Associated Query  | Status | Actions              |
|-----------|--------------------------------------|---|--------|----------------------|
| 5         | DVM Errors                           | SELECT * FROM [dbo].[B2B_EVENT_INFO_TST] WHERE DVMResponse IS NOT NULL  | Active | <a href="#">Edit</a> |
| 6         | All Failed Transactions              | SELECT * FROM [dbo].[B2B_EVENT_INFO_TST] WHERE Status = 'E'   | Active | <a href="#">Edit</a> |
| 7         | Failed Purchase Orders               | SELECT * FROM [dbo].[B2B_EVENT_INFO_TST] WHERE EventType = 'PurchaseOrder' AND Status = 'E'   | Active | <a href="#">Edit</a> |
| 8         | Failed Invoice Events                | SELECT * FROM [dbo].[B2B_EVENT_INFO_TST] WHERE EventType = 'InvoiceEvent' AND Status = 'E'  | Active | <a href="#">Edit</a> |
| 9         | Failed Purchase Order Change Events  | SELECT * FROM [dbo].[B2B_EVENT_INFO_TST] WHERE EventType = 'PurchaseOrderChgEvent' AND Status = 'E'   | Active | <a href="#">Edit</a> |
| 10        | Failed Transactions in Last 24 Hours | SELECT * FROM [dbo].[B2B_EVENT_INFO_TST] WHERE Status = 'E' AND DateTime > DATEADD(DAY, -1, GETDATE())  | Active | <a href="#">Edit</a> |
| 12        | Errors per Sender                    | SELECT SenderIdentifier, COUNT(*) as ErrorCount FROM [dbo].[B2B_EVENT_INFO_TST] WHERE Status = 'E' GROUP BY SenderIdentifier ORDER BY ErrorCount DESC     | Active | <a href="#">Edit</a> |
| 13        | Errors per Receiver                  | SELECT ReceiverIdentifier, COUNT(*) as ErrorCount FROM [dbo].[B2B_EVENT_INFO_TST] WHERE Status = 'E' GROUP BY ReceiverIdentifier ORDER BY ErrorCount DESC | Active | <a href="#">Edit</a> |
| 14        | Errors per Component                 | SELECT ComponentName, COUNT(*) as ErrorCount FROM [dbo].[B2B_EVENT_INFO_TST] WHERE Status = 'E' GROUP BY ComponentName ORDER BY ErrorCount DESC           | Active | <a href="#">Edit</a> |



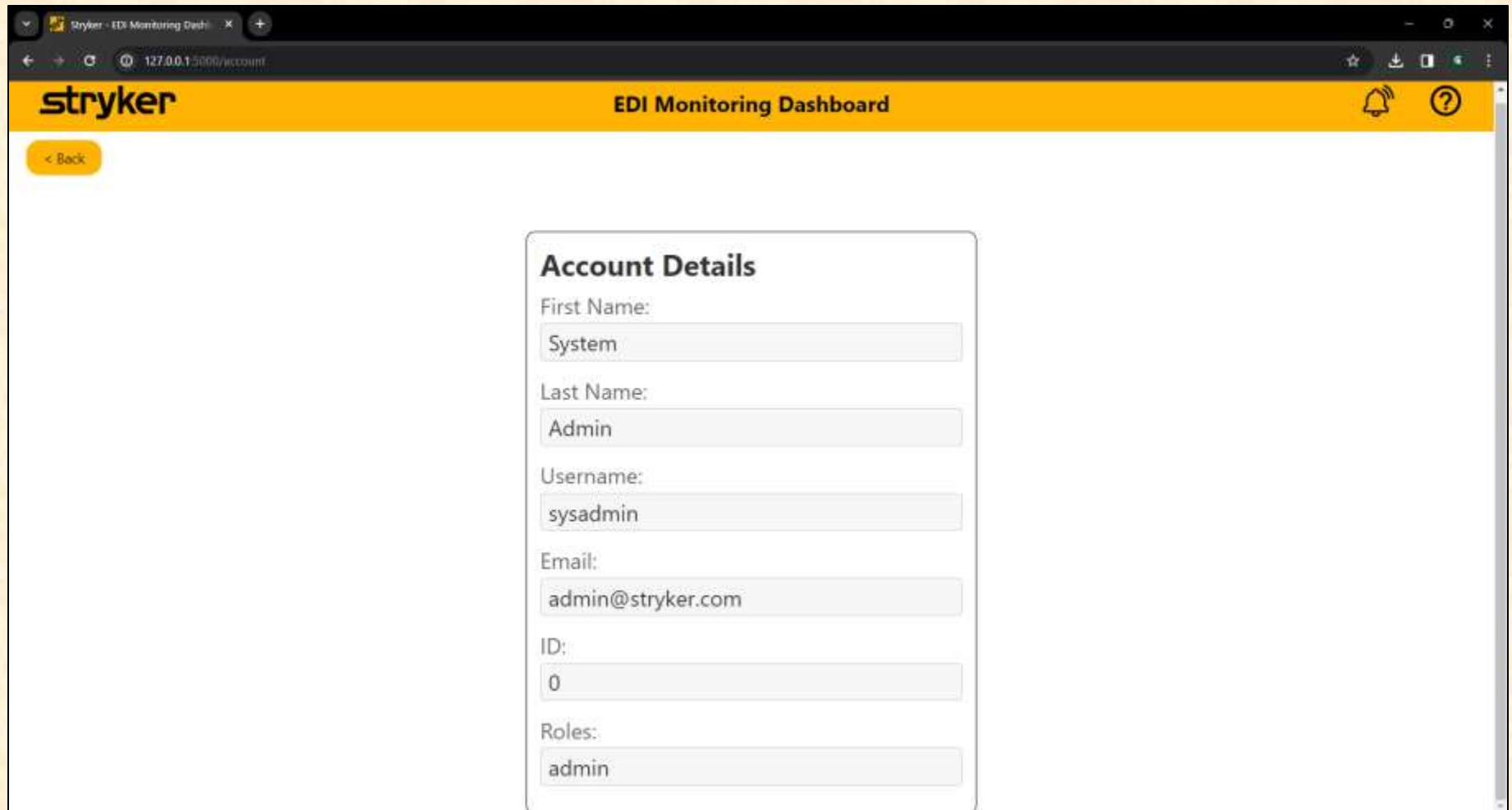
# Admin Panel – Report Presets

The screenshot displays the Stryker EDI Monitoring Dashboard Admin Panel. The page title is "Admin" and it features a navigation bar with "Search", "Alerts", and "Reports" sections. Below the navigation bar, there is a "Reports Configuration" section with an "Add" button. A table lists four report presets, each with a unique Preset ID, Report Name, Type, Description, Display status, and an Edit action button.

| Preset ID | Report Name                | Type    | Description | Display | Actions |
|-----------|----------------------------|---------|-------------|---------|---------|
| 1         | Event Type by Status       | DEFAULT | None        | Active  | Edit    |
| 2         | Error as Percent of Whole  | DEFAULT | None        | Active  | Edit    |
| 3         | Sender ID by Count of GUID | DEFAULT | None        | Active  | Edit    |
| 4         | Receiver by Count of GUID  | DEFAULT | None        | Active  | Edit    |



# User Details



The screenshot shows a web browser window with the URL `127.0.0.1:5006/account`. The page header features the Stryker logo on the left and the text "EDI Monitoring Dashboard" in the center. On the right side of the header, there are icons for a notification bell and a help/question mark. Below the header, there is a yellow button labeled "< Back". The main content area contains a white box with the title "Account Details" and several input fields:

| Field Label | Value             |
|-------------|-------------------|
| First Name: | System            |
| Last Name:  | Admin             |
| Username:   | sysadmin          |
| Email:      | admin@stryker.com |
| ID:         | 0                 |
| Roles:      | admin             |

# What's left to do?

- Stretch Goals
  - User/role management panel
  - Single Sign-on (SSO) / OAuth 2.0
  - (?) NoSQL database for Payloads
- Other Tasks
  - UI Touch-ups
  - Enhance query performance with connection pooling
  - Email SMTP config with Stryker credentials



# Questions?

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