#### The Seneca Park Zoo Business Intelligence Dashboard **Coach: Team Zoomologists: Sponsor:** Tyler Kiesman, Alan Xiao, Daniel Gude Ruth Northrop, Beth LaPierre Scott Hawker **Key Features Domain Problem** The Seneca Park Zoo Society gets their information from a variety of sources, Data panels for displaying information about different revenue but there is no quick way of getting an streams overview of various categories they care about. In order to get the information, we pull information from Blackbaud An alarm system that creates alerts on the dashboard when Altru on startup and every few hours. revenue goals aren't being met To solve this problem, we created a dashboard that collects information

from Blackbaud Altru, and then compile them into a webpage that everyone can view from any browser.

# **Tech Stack**

The Dashboard uses a React front end, Express back end. We do not have a database, but we have configuration files to keep track of persistent data. The Dashboard uses NodeJs and NPM for package management. The server is hosted on a Windows server set to deploy the website to a certain URL.



# Architecture

When deciding the architecture, portability was strongly considered. A web architecture was chosen to allow easy distribution to the end user. A React frontend specifically allows for fast iterative development and modular additions. The Node Express backend is lightweight to host in order to help with portability and simplicity. The Node backend works nicely with the React frontend to keep a unified coding standard across the application. A database was not used to keep complexity low and configuration files were used for easier hosting usability.

A configuration editor so the application's settings can be changed from the webpage

Links to social media pages to view content

# **UI Design**

Simplicity was at the forefront when constructing the UI Design. With a dashboard like this, there is an exuberant amount of data being presented. The UI must be structured to present this data in the most clear way as possible. Simple titles and concise labels were used to organize the presented data without getting in the way of comprehension by the end user. A multi-page approach was used to organize data into their respective business departments. The style across these pages are consistent so that after reading one page, the user knows how to read all the others.





## Methodology

### Scrum

The team followed a Scrum approach with our own modifications. We chose Scrum because we had an active product sponsor who attended meetings and who we could show progress to. Our sprints were two weeks long and at the end we'd demo our work. We used t-shirt sizes for estimating stories and used a burndown chart to track our progress.



# **Future Work**





### Data drill down

	HOME	ADMISSIONS	MEMBERSHIPS	CONSERVATION	PROGRAMS	DEVELOPMENT	<b>.</b>
Memb	ersh	ips		Tran	saction	C	
Revenue			×	man	MTD 2020	5	
MTD \$		87,789 ~~~	~		WITD 2020	2	
Budget \$		0		Join	294 0	$\sim$	
% Budget has not been set!				Renew	213 0	-~	
Actual \$		104,979			0.47	$\cap$	
				Rejoin	347 0		
				Lapsed	0 0		
Membership Levels							
Individual	1,120						
Couple	1,355						
Grandparent	1,417						
Family	6,834						
Penguin Circle	1,160						
Otter Circle	99						
Life	19						
PIC	0						
Total	12,004						







