Lab: Microservice Design

Consider the following application, and make some notes on how you might design this as a Microservice application. Focus your work on the design and do not worry about exact tools or implementation initially. Try to consider the following questions in your design:

* Which services are responsible for which application roles?
* Which services are dependent on one another?
* Which services would need to be considered when deploying changes to each service (backward compatibility)
* Can you scale each service horizontally and independently?
* What are your likely points of failure or performance bottlenecks?

Your organization has asked you to build a small application to do content management for the marketing team. Your application has the following requirements:

* The marketing team will log in via the company Active Directory accounts, but they want to allow non-employee contractors to log in via application-specific accounts as well.
* The marketing team will primarily be building “landing pages” for purchased web advertisements. These will usually be small, single web pages describing an offer and providing links to “call to action” items
* The marketing team would like the application to gather metrics about the landing page traffic - sources of traffic, browser types, time on the page, etc.
* The marketing team maintains a library of purchased media - stock videos, images, fonts, etc. they would like to be able to use in the landing pages.
* Marketing personnel will create, edit, and manage these landing pages via a web-based content management interface.