FULL SCRIPT

SLIDE 1

Hi my name is Robbie Goodman
I'm a student at Northwestern University, Class of 2022, majoring in Computer Science

This summer I was a Solution Engineering Intern in the Public Sector on Jacquannette's ECS team

In this demo, I'll be showing how NOAA can use the Salesforce platform to make timely decisions informed by live and historical data analytics

SLIDE 2

A quick overview of my agenda for the day

- First, I'll give some background on coastal flooding and its recent rise
- Then, I'll introduce some personas and the challenges I'm looking to solve for them,
- Which leads into a live demo
- And then we'll have some time for questions at the end

SLIDE 3

Some of the terms I'll be using today are

- storm surge is difference between the measured water level and current predicted tidal height
- tidal surge is the difference between the measured water level and maximal high tide for the day
- High-tide coastal flooding begins to occurs with tidal surges of 1.5 feet

And Managing coastal flooding is more and more difficult

- NOAA reported earlier this summer that the frequency of high-tide flooding on the east coast,
  - tied to severe weather events or otherwise,
  - Has drastically increased in the last 20 years
- NOAA predicts within the next 10 years, coastal flooding could occur 50-75 times a year in many locations

SLIDE 4

Managing any emergency is not a one step process
Today we are going to have focus on

- preparation (flood barriers)
- Response (text notifications)
- Short Term Recovery (flood damage auditing)

SLIDE 5

Our operating persona today will be

- Sofia tauss, who will use the service console to manage coastal flooding service and alerts
- She's super excited to about the new platform,
    - because she doesn't have to watch 30 weathermen every morning to do her job

Other Personas related:

- Ben Bailey, help us set up flood barriers
- Allie will audit some flood damage
- We are also gonna save the stroman's from flood damage to their surf shop

SLIDE 6

Currently

- Sofia uses the pictured NOAA website for historical and current data
- While functional, this website only allows for one visualization at a time, and no ability to compare between sensors
    - It takes about 30 seconds to see the water level of the past week in any given sensor
    - This complicates the process of sending out service requests, leading to inefficient preparation and recovery
    - Live data is also not readily available, making it difficult to send out timely flood warnings

Transition

One day NOAA decides enough is enough, and invests in the salesforce platform to streamline their coastal flooding management

- With this come three immediate benefits,
    1. Top tier visualizations with integrated analytics **click around**
    2. Automated Business Processes **sidebar**
    3. Timely Flood Notifications **data stream**

- With the power Salesforce OpenAPI, Sofia is connected to all the data she needs
    - And with platform events, Sofia can see this data coming in Live
    - So all the data we see today is fully up to date
- WIth the power of Einstein analytics
    - Sofia has access to geographic and chronological visualizations, with analytics baked in
    - This data tells Sofia what she needs to know immediately, the Tidal Surge, which isn't at all clear on NOAA's website
- Transition from Cumulative to individual data seamlessly,
    - with the ability to see the most recent flood records
    - Major change from the past website
    - And also the ability to see the weather right now in any location on the same page

Flood Barrier

- Sofia will walk through our use cases
- First, we are going to do some analysis leading to a flood barrier case
    - On the right we are looking at analysis of the floods from the past month
        - Color is the max tidal surge, size is the average storm surge
    - With Einstein, Sofia sees the most important analytical information first, the platform prioritizes for her
- We see a major spike on the fourth from hurricane Isais,
    - and Einstein gives Sofia the ability to customize all of her visualizations in two clicks (**Flood Duration)**
    - So looking at historical data is no longer 45/sec per location, but literally one click away (**Hurricane Isais)**
- **Filter NC**
- **Create Case**
    - Sofia can see clearly Wilmington is a location in significant need of protection
        - And she can go through the automated business process, from the dashboard
        - Salesforce allows Sofia to see data and act on it in one fell swoop
- This will reload our page

Flood Damage

- With this next use case, lets dive into the ability to compare between locations effortlessly
- **Click into USCG**
    - Note timeline, no floods
    - *the whole NOAA Gif=two clicks*
- Sofia sorts by flood duration, and sees that there is a pretty clear correlation

between flood duration and peak tidal surge
    - So if we look at the highest duration areas, we see a lot of Virgina and NJ
    - Lets look at the two of these
- It looks like the Chesapeake is more at risk, you can see higher water further inland, and more coastline
    - Suggests damage could be higher
    - Einstein visualizations provides Sofia the tools she needs to make difficult decisions as quickly as possible
    - And automates the process of submitting those work orders
- So lets submit our case to the Chesapeake area
    - Which will reload our page
- And salesforce gets confirmation that our cases have been submitted, and we can monitor the progress of Allie on this platform

Text Notification

- Finally, we will see how much this dashboard helps Sofia prepare for emergencies.
- She can see any locations that have high storm surges
    - From there can dive into the water level timeline in any of those locations to search for trends
    - She can also check out the weather in that location to see if there is potential for extra rainfall
    - What used to be a difficult task, with Einstein and Lightning is now a piece of cake
- So Sofia can respond as quickly as she needs to
- But sometimes, even Sofia can't be as fast as Salesforce can
- Since we are looking at LIVE DATA, there are no floods right now, but I'll simulate one for the stroman's
- The Stroman's for example, work on rainy days because surfers love the big waves
    - They need advanced notice, not just of weather but of any form of flooding
    - When the storm surge gets above half a meter, which is getting towards where we might see high tide flooding
    - Then the Stroman's will get a text with the relevant information

Conclusion

Einstein highlights the most important data for Sofia, and customizing views available at lightning speed
With workflow process is baked into the dashboard, Salesforce allows for data driven decision making in the truest sense of the term
And with Salesforce Platform events, Sofia is always prepared for the next emergency