Supporting Email Evidence

# Assigned one leader, gave that person authority and responsibility

**From:** Robert Damashek   
**Sent:** Thursday, June 18, 2015 5:34 PM  
**To:** Rose Wang  
**Subject:** Re: Preliminary Context and User Story

It doesn't hurt. There may be a correlation we could propose that would extend what we have. I think Eden can plan around what we have.

Robert   
  
Sent from my iPhone

On Jun 18, 2015, at 5:29 PM, "Rose Wang" <[rwang@binarygroup.com](mailto:rwang@binarygroup.com)> wrote:

Robert

Do we still need to talk to my friend at FDA tomorrow morning?

Rose

**From:** Robert Damashek   
**Sent:** Thursday, June 18, 2015 5:28 PM  
**To:** Eden Chen  
**Cc:** Charles Hu; Gail Chen; Rose Wang  
**Subject:** Re: Preliminary Context and User Story

Eden, our session with the SME was excellent, and we now have a few user stories we can do entirely with the adverse event data, and know what data to get at in the tables to support it. I will send you a write up this evening describing user stories and either Gail or I will add the source data fields. Gail us downloading and trying out the Pentaho community edition with this data set.

Robert  
  
Sent from my iPhone

On Jun 18, 2015, at 2:55 PM, "Eden Chen" <[eden@fishermenlabs.com](mailto:eden@fishermenlabs.com)> wrote:

Hey Robert - I had on my calendar 1130, but saw that you sent around a noon invite so I’m assuming we are still on for noon. I tried joining the Lync meeting but you may have not had it up and running so will try again shortly.

Thanks!

[Eden](mailto:eden@fishermenlabs.com) | [Fishermen Labs](http://www.fishermenlabs.com) | [@edenchen](https://twitter.com/intent/follow?original_referer=https%3A%2F%2Ftwitter.com%2Fabout%2Fresources%2Fbuttons&region=follow_link&screen_name=edenchen&tw_p=followbutton&variant=2.0)

On Jun 18, 2015, at 11:53 AM, Robert Damashek <[rdamashek@binarygroup.com](mailto:rdamashek@binarygroup.com)> wrote:

Eden/Charles,

In case you can’t get in to the web meeting, here’s a doc we’ll be discussing to set the context for the challenge.

Robert

**Binary Group**

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# Assembled a multidisciplinary and collaborative team

-----Original Message-----  
From: Robert Damashek   
Sent: Wednesday, June 17, 2015 9:31 PM  
To: Rose Wang  
Cc: Dan Schaaf; David Stephens; Cindy Brook; Charles Shafer  
Subject: Re: Fishermen Labs

Shall do. We might be able to get Shawn engaged and just do a design prototype, but that would shift us to the design pool.

Robert

Sent from my iPhone

> On Jun 17, 2015, at 9:16 PM, "Rose Wang" <[rwang@binarygroup.com](mailto:rwang@binarygroup.com)> wrote:

>

> All,

>

> I just got off the phone with Eden. They are still going through the RFQ. I told him of our analysis and what it would take for Binary's resources given our commitments for the next 7 days to make it work. He said he could make one or two developer and one part-time technical lead available. He asked if the competition allows for offshore developers because he has a team in Ukraine. I told him it is not likely that we can do that (Cindy/Charlie: can you validate?)

>

> We plan to hold a joint team meeting tomorrow at 2:30 to discuss everything in detail. Robert, can you send an invite?

>

> Thanks,

>

> -- Rose

> Sent from my iPhone, please excuse typos

# Used an iterative approach, where feedback informed subsequent work

**From:** Robert Damashek   
**Sent:** Wednesday, June 24, 2015 9:03 AM  
**To:** Kevin Quach; David Stephens; Eden Chen; Charles Hu; Rose Wang; Dan Schaaf; Gail Chen; Rafael Diaz  
**Subject:** RE: GSA Agile Project Update

Kevin,

The visualizations look good. Didn’t catch the difference in the API on reaction/outcome. BTW, sequelae are conditions that occur as a consequence of the event (I looked it up!) In terms of E and F, Rafael developed a few more visualizations yesterday based on a follow on user review of the Tableau prototype with a SME on Monday. All of these are different ways to look at the population of patients who had a fatal reaction (death outcome in the other database). I’ve asked him to send you the workbook.

Personally, I think that it’s good to be able to show the raw data in the table, at least in one view or in a drill down. If you have time to include a couple of the other views that would show value to people exploring the influence of multiple factors in certain kinds of events. You would need to come up with labels for the charts that represent what you’re showing with the correct values for the API.

I might suggest:

* Bar Chart By Country – bar chart showing count of fatal events by country, weight range (we’ve grouped weights to make it easier to see) and age range (similarly grouped)
* BubbleByWeight – bubble chart showing count of fatal events by drug and weight range

Thanks,

Robert

**From:** Kevin Quach [<mailto:kevin@fishermenlabs.com>]   
**Sent:** Wednesday, June 24, 2015 2:48 AM  
**To:** David Stephens; Robert Damashek; Eden Chen; Charles Hu; Rose Wang; Dan Schaaf; Gail Chen; Rafael Diaz  
**Subject:** GSA Agile Project Update

Hey everyone,

Just wanted to share some of the hard work we've been doing these last several days and you can check it out live:

<http://openfda-production.elasticbeanstalk.com/>

As you can see, it's still very much a work in progress, but we still plan to have all of Epic 1 completed by Thursday as well as filters and other UI components. As of now, I believe we have completed or nearly completed **User Stories B, C, D**. We are currently working on **A,** **E** and **F** and they should be straight-forward.

**Actually, regarding E and F, in the Tableau mockup, these user stories are being represented as a table, not a graph/chart. Should we just use a table like in the mockup, or should we create graphs/charts?**

A couple things to point out regarding Reaction Outcome. In the Tableau mockup and and FDA raw data files, they use a different outcome code like CA, DE, DS. However, this was no where to be found in the API. Instead they use:

*patient.reaction.reactionoutcome*

*Outcome of the reaction or event at the time of last observation.*

*1 = Recovered/resolved.*

*2 = Recovering/resolving.*

*3 = Not recovered/not resolved.*

*4 = Recovered/resolved with sequelae.*

*5 = Fatal.*

*6 = Unknown.*

So if you look at that outcome pie chart, this is the data you are seeing. We can discuss this further in our standup if needed.

---

Technologies used so far:

Ruby on Rails - web framework for backend

Angular.js - JavaScript framework for front-end

Docker - automated deployment containerization

Nginx - web server

Bower - package manager

Github - VCS

Linux - OS

AWS Elastic Beanstalk - hosting & deployment

numerous open-source libraries for rendering UI

Let me know if you have any questions!

Best,

Kevin

--

Kevin Quach

Project Manager

Fishermen Labs

[www.fishermenlabs.com](http://www.fishermenlabs.com)

310.994.0638

**From:** Robert Damashek   
**Sent:** Friday, June 26, 2015 7:01 PM  
**To:** kevin@fishermenlabs.com  
**Cc:** Rafael Diaz; Gail Chen  
**Subject:** Comments and Observations from a User's Perspective

Kevin,

Gail, Rafael and I all reviewed the dashboards from a user’s perspective and made a number of observations.  Most of the proposed labelling and filter changes were based on our prototyping and usability work with Tableau, so you’ll see them reflected in the most recent Tableau workbook.  As you requested, we’ve captured these as edits on the attached screenshots.

Rafael looked a bit more in depth from overall usability, and his notes are below.  In general, we couldn’t get any of the filters to work as expected because the filters are not applied either automatically when you change them or when you hit the search button, and there is no apply (or reset) button.

For the Report tab:

1. The reporting Date filter has no effect but Kevin said wasn’t available yet.
2. Drug filter has no effect on the results I filtered on one of the drugs but nothing in the bar chart changed as a result. It only shows what you selected with an ‘x’ so that you can remove the filter if you want.
3. Same issue with the Patient outcome filter.
4. The Age filter goes from 0 – 200. The filter (this applies to all of them) should only include the available values in the Db. So when I go to the Search Results chart and put in say 200, no records show up. Of course there aren’t any 200 years olds still alive and taking drugs! 
5. The Weight filter should also only have a range of values that is available in the Db. Also, can we put on the filter whether the weight is in Kg or lbs?
6. General: Title of the dashboard should reflect what the dashboard is reporting on. Robert - This is reflected in the attached screenshots.
7. General: What is the Search field at the top of the report used for?  Robert - Everything you type in returns an error – No matches found!
8. General: Why are we showing Total Records at the top right part of the screen in large, bold text for? This places emphasis on that part of the screen and implies importance as compared to the rest of the visualization. I would place that type of information at the bottom of the visualization in much smaller text since it’s not a very important aspect of the visualization.
9. General: Each chart in the visualization should be titled. For example, I didn’t know what the bar chart was showing since it only has “count of events”, the %, and the timeline. The chart below that is called “Search Results” with filters that allow you to refine the results. I would rename that because the 1st thing I think of is that it was the results of whatever search term I entered at the top of the screen where you can perform a search in the search box. This area might be labelled Event Details. Also, how are these  column filters interacting with the ones on the left-side of the screen? One more thing on the Search Result tabular chart. The gender column is shown as “1” or “2”. It should be Male or Female. When I try to filter on the Outcome column, I’m not getting any records by entering any of the outcomes I see on the left-side filter selection field. The other filters seem to work fine however.
10. General: Rafael - on the tooltip mouse hover for the bar chart, can you add the year represented in this chart, Robert - and say “in” rather than “on” the month? Rafael - Also, the legend shows a blue dot with month as the label. You can probably remove that legend altogether since it really doesn’t add any value. The x-axis label already shows us that this is a monthly total.

For Report2 tab:

1. Rafael - This looks pretty good in general. The only comment that’s not a repeat of my observations above is that for the Country chart, can we change the Y-axis label name to something like “Count of Reports” or “% of Reports”?  Robert - actually, don’t think the Country chart really adds value unless you can actually see the list of the top 5 or 10 reporting countries.
2. General: This report seems to be what looks like our executive summary report chart since it has various aspect of the data shown in several charts. I would move this tab as the 1st tab and maybe label it as such.

For Drug Usage Report: Rafael - Looks good. No comments! Robert – Same issue as Report 2 #1, I don’t think it adds value unless you can actually see the top 5-10 drugs involve in adverse events, and then filter it by outcome. 

Overall: Looks pretty good given the challenges we were faced with both from the technical side with the limitations of the Kibana product and the timeframe we had to do this all in. There were no 404 “web page not found” errors or any other types of errors as I navigated through the pages.

General comments on dashboards:

1. As a researcher, I would expect that our dashboard would visually bring out what our user stories have in them for epic 1. So report2 does answer a lot of those questions at 1st glance. That’s good. User story 1a, part of 1b, 1c, and 1d are represented by this report. 1e is not shown right now and I don’t think we really need 1f, which is the reporter’s occupation. Chuck has already indicated that knowing the occupation of the person who reported the event is not really important.
2. In terms of dashboards, what would be interesting to see is when I look at report 2 and I see in the pie chart that 9% of the events resulted in death. So I would want to know all of the drugs associated with this particular outcome. So for our report, I should be able to go over to our drug usage chart, click on the filter for Outcomes, select “fatal” and the bar chart should show me all of the drugs that were involved in a patient’s death. If we can at least show this one use case, I think it would go far in showing that our application can bring to light different levels of understanding of the data without having to completely change your report by adding additional charts.

Robert

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**From:** Robert Damashek   
**Sent:** Monday, June 29, 2015 2:02 PM  
**To:** kevin@fishermenlabs.com  
**Cc:** Rafael Diaz; Gail Chen  
**Subject:** Issues lists and priorities

Kevin,

Here’s our prioritized list. Having the basic filter functionality working is all equally important and most important to get done.

|  |  |  |  |
| --- | --- | --- | --- |
| # | Priority | Tab | Issue |
| 1 | 1 | Report | The reporting Date filter has no effect but Kevin said wasn’t available yet. |
| 2 | 1 | Report | Drug filter has no effect on the results I filtered on one of the drugs but nothing in the bar chart changed as a result. It only shows what you selected with an ‘x’ so that you can remove the filter if you want. |
| 3 | 1 | Report | Same issue with the Patient outcome filter. |
| 4 | 1 | Report | The Age filter goes from 0 – 200. The filter (this applies to all of them) should only include the available values in the Db. So when I go to the Search Results chart and put in say 200, no records show up. Of course there aren’t any 200 years olds still alive and taking drugs!  |
| 5 | 1 | Report | The Weight filter should also only have a range of values that is available in the Db. Also, can we put on the filter whether the weight is in Kg or lbs? |
| 6 | 1 | Report | General: Title of the dashboard should reflect what the dashboard is reporting on. Robert - This is reflected in the attached screenshots. |
| 7 | 1 | Report | General: What is the Search field at the top of the report used for?  Robert - Everything you type in returns an error – No matches found! |
| 8 | 2 | Report | General: Why are we showing Total Records at the top right part of the screen in large, bold text for? This places emphasis on that part of the screen and implies importance as compared to the rest of the visualization. I would place that type of information at the bottom of the visualization in much smaller text since it’s not a very important aspect of the visualization. |
| 9 | 2 | Report | General: Each chart in the visualization should be titled. For example, I didn’t know what the bar chart was showing since it only has “count of events”, the %, and the timeline. The chart below that is called “Search Results” with filters that allow you to refine the results. I would rename that because the 1st thing I think of is that it was the results of whatever search term I entered at the top of the screen where you can perform a search in the search box. This area might be labelled Event Details. Also, how are these  column filters interacting with the ones on the left-side of the screen? One more thing on the Search Result tabular chart. The gender column is shown as “1” or “2”. It should be Male or Female. When I try to filter on the Outcome column, I’m not getting any records by entering any of the outcomes I see on the left-side filter selection field. The other filters seem to work fine however. |
| 10 | 2 | Report | General: Rafael - on the tooltip mouse hover for the bar chart, can you add the year represented in this chart, Robert - and say “in” rather than “on” the month? Rafael - Also, the legend shows a blue dot with month as the label. You can probably remove that legend altogether since it really doesn’t add any value. The x-axis label already shows us that this is a monthly total. |
| 11 | 1 | Report | On Report 2, the name of the drug is not being displayed properly in the drug X event count display |
| 12 | 2 | Report 2 | Rafael - This looks pretty good in general. The only comment that’s not a repeat of my observations above is that for the Country chart, can we change the Y-axis label name to something like “Count of Reports” or “% of Reports”?  Robert - actually, don’t think the Country chart really adds value unless you can actually see the list of the top 5 or 10 reporting countries. |
| 13 | 2 | Report 2 | General: This report seems to be what looks like our executive summary report chart since it has various aspect of the data shown in several charts. I would move this tab as the 1st tab and maybe label it as such. |

Robert

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**From:** Robert Damashek   
**Sent:** Tuesday, June 30, 2015 1:26 PM  
**To:** Robert Damashek  
**Subject:** Note to Self - prototype usage issues

BIG Pluses:

1. Filters work
2. There’s a reset button
3. Choosing a specific drug on Demographics tab, and applying the filter seems to show other drugs present with it in the Drug chart – does it really or is this an artifact?

By Month Usability issues:

1. May want to change name of Search button to Apply Filters
2. Country names not sorted alphabetically, would be better if had actual country names vs 2 digit alpha code
3. Drug names not sorted alphabetically
4. A little hard to select and move age and weight sliders
5. Clicking reset doesn’t reset age and weight sliders, appears to reset the data views though

By Month Niceties:

1. Show date range on the Adverse Report, rename to Details Report
2. Put a Reset and Apply Filters button at bottom of filters as well as on top, so you don’t have to scroll screen
3. Apply button in Date Selection seems to be superfluous, results don’t change until you press Search button above.  Would be more intuitive if you clicking on start and/or end date would apply them.  Might be best now to just remove it.

Demographics  Usability Issues:

1. Selected a single outcome (Fatal) and applied filter, but a small set of outcomes appeared in outcome chart.
2. Selected an age range (28-70)  and applied filter, but a small set of events outside that range (71-80) appeared in age chart.
3. Country chart is not really useful unless you can see countries that represent the bulk of the population.  Can’t see that on X-axis underneath bars.

Demographics Niceties:

1. Gender circle chart is bigger than Outcome circle chart

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**From:** Rafael Diaz   
**Sent:** Friday, July 03, 2015 1:19 AM  
**To:** Robert Damashek  
**Cc:** Dan Schaaf; Gail Chen  
**Subject:** Current burndown chart

Team,

Here’s a snapshot of what our burndown chart looks like now after closing these issues.



Rafael Diaz

Sr Systems Architect

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# Provided sufficient documentation to install and run their prototype

**From:** Robert Damashek   
**Sent:** Wednesday, July 01, 2015 8:37 PM  
**To:** Phil Demas; Dan Schaaf  
**Cc:** Gail Chen; Patrick Reardon; Rafael Diaz; Rose Wang; David Stephens  
**Subject:** RE: GSA/FDA 18F - Install readme

Phil, that is great news!

Thanks very much,

Robert

**From:** Phil Demas   
**Sent:** Wednesday, July 01, 2015 8:35 PM  
**To:** Robert Damashek; Dan Schaaf  
**Cc:** Gail Chen; Patrick Reardon; Rafael Diaz; Rose Wang; David Stephens  
**Subject:** GSA/FDA 18F - Install readme

All,

I was able to get the local copy of APP to work on AWS.  The documentation has been updated.  I will need to try a clean install following the readme exactly.  Also, it appears the webserver stops after I shutdown Putty (SSH program into server.)  Not sure if this is by design because it’s local/desktop copy?  I will check with developers tomorrow.

Phil