

236 Solo Project 1:  
Website Design  
Design Document  
Timothy Bonin

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# I. Product Goal Statement

## Product Goal Statement

9/14/14

### **Context**

Within the past three years, the Kerbal Space Agency has exploded into space (sometimes literally) and they are now one of the leaders in space exploration. They launch several satellites a year and are planning many thrilling space exploration missions for the coming years. They are currently only using some social media sites and tv news sources to communicate with the public, and they wish to expand in order to reach more people. The agency wants us to create a website that will entice the public to learn more about the agency while also selling some small merchandise in order to gain a little more profit.

### **Problem**

The general public needs a better way to both interact with the agency and learn more about the missions going on as this will bring more interest into the company and possibly bring in more funding for them to continue.

### **Solution**

The website will have multiple sections for different levels of education/knowledge so that it is more accessible to people of all ages. The main page will be a middle ground with a mix between text and images with all the basic information. Using links, the user will be able to go into more basic pages or more advanced pages depending on what the user needs. In addition, there will be an interactive map and list showing all of the missions currently in progress and also those which have already been completed. Social media will be integrated into the website so people can more easily keep up to date on news and other information. A store section will also be included so that people can purchase small items and souvenirs from the company.

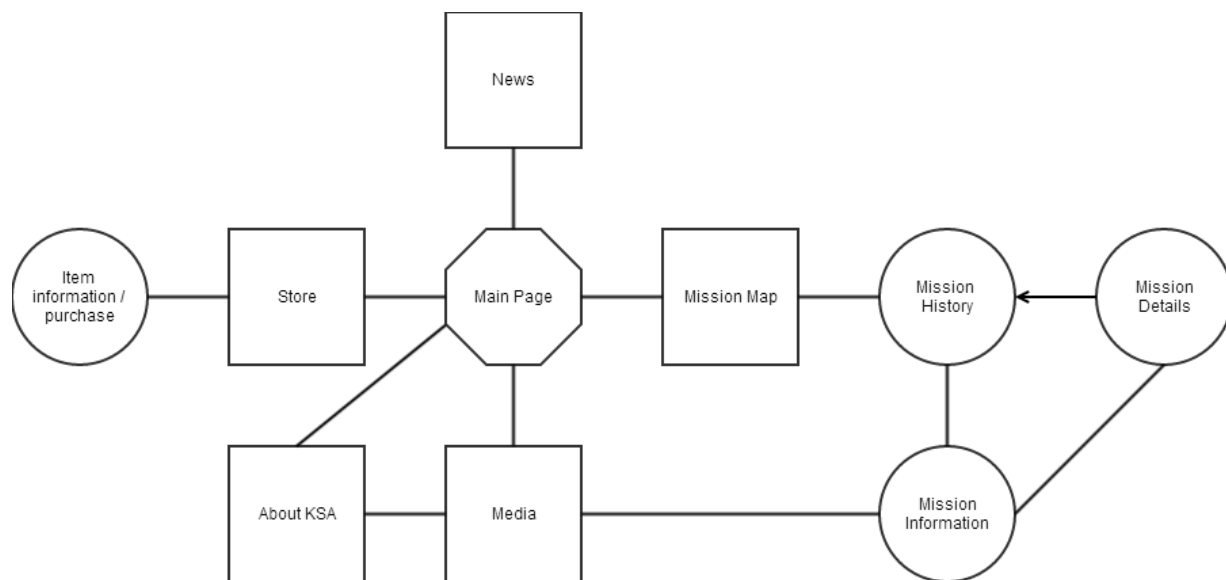
### **Theme**

Exploration

## II. Functional Specification

Page Name	Function	Contents	Widgets	Linked From	Links To
<b>Home</b>	Main hub for all other pages	Contains major links to different sections of the site; some small news	Twitter side bar; Top navigation bar; Small map with most recent mission	Top Nav Button	News; Mission Map; Media; store; about
<b>News</b>	Lists news and information about the agency and upcoming events	Contains a record of all of the news for the agency. This will be the main hub for getting information on events	Top Nav Bar; twitter, facebook, and tumblr widgets and links	Top Nav Button; Home;	Home;
<b>Mission Map</b>	Hosts interactive map showing all current missions	Interactive map showing current missions; links to previous missions	Top Nav Bar; large interactive map	Top Nav Button; Home;	Home;
<b>Mission History</b>	Show list of all missions from KSA	List of all missions made by the agency with small snippets of info	Top Nav Bar; Dynamically updated sorted list (missions)	Mission map;	Home; Mission Information
<b>Mission Information</b>	General information about a select mission	Enough information for a basic user, mostly picture and video	Top Nav Bar; Picture Viewer	Mission Details; Mission History	Home; Mission Details
<b>Mission Details</b>	Much more in-depth page of information about a mission	Contains every last tid-bit of information from a mission (comm logs, mission coordinates, etc)	Top nav Bar;	Mission Information	Home; Missions Information
<b>About KSA</b>	Page describing the	General information	Top Nav Bar; small image	Top Nav Button	Home; Media

	agency's goals and values, as well as information about the center itself	about the agency, mostly text with a few supplemental pictures	gallery		
<b>Media</b>	Picture and videos of missions and other space related items	Gallery of any and all media related to the agency and its missions	Top Nav Bar; Side bar for navigation; Large gallery	Home; About	Home;
<b>Store (Main Page)</b>	Shows featured items for the user and hosts a search feature	Links to the current featured items along with a search box for the user; many pictures shown	Scrolling featured items; Top nav bar; search bar	Top Nav Button	Home; item pages
<b>Merchandise Page (ex: t-shirt)</b>	Shows the information for a certain piece of merchandise and an option to purchase it	In depth information about the current selected item; pictures and reviews	Top nav bar; add to cart function; item option menu (colour, size, etc)	Store;	Store; cart / checkout



### III. Contextual Inquiry

#### **Interviewee #1:**

**Name:** Joseph Saunders

#### **Summary:**

Joseph is in his early 20's and currently lives in the residential suburbs of London in the United Kingdom. He has completed secondary school and is currently working part time and spends a large amount of time online.

#### **Interview:**

***How do you go about finding a specific piece of information online?***

Type in a relevant phrase online and go from there

***If a government source were available for the information, but it was harder to find, would you be more inclined to go to a place similar to Wikipedia?***

If I considered the information important, I would go to the more reliable source.

***How interested are you in space and the vessels we send there?***

Extremely interested, it's one of my favourite subjects.

***How do you like to get up to date information on people/projects/etc.?***

Mostly by following what I'm interested on twitter or tumblr.

***What are a couple of your favourite functions of this process?***

Things are easy to view on social media and they get straight to the point without a huge block of text to read.

***Do you do any online purchasing?***

Yes, at least a couple items a month

***What do you enjoy about how you currently purchase online items?***

I like the fact that I don't have to leave my chair to purchase the items I want.

**Interviewee #2:**

**Name:** Jared Stender

**Summary:**

Jared is a student from Bowmanville Canada who spends much of his downtime at home. He uses his computer to look up any and all information he needs, and he prefers to only use websites that are simple to use.

**Interview:**

***How do you go about finding a specific piece of information online?***

Use the computer and go to google

***If a government source were available for the information, but it was harder to find, would you be more inclined to go to a place similar to Wikipedia?***

I'm generally looking for the easiest route so I'd go to wikipedia .

***How interested are you in space and the vessels we send there?***

It's interesting to know what's there, but I don't keep on top of it all the time.

***How do you like to get up to date information on people/projects/etc.?***

I like to find relevant youtube videos and find things on tumblr.

***What are a couple of your favourite functions of this process?***

Sources on youtube are very concise and to the point compared to like the normal news outlets.

***Do you do any online purchasing?***

Yes, but not too often. Maybe an item every two months or so.

***What do you enjoy about how you currently purchase online items?***

It's great to be able to sort out everything into smaller sections instead of having to look at everything at once.

## IV. Context Analysis

### **Analysis Goal:**

The goal for this project is to design a website for the Kerbal Space Agency which allows the public to access information about the different missions currently occurring as well as general information about the agency. This would allow the general public to become more interested within the space community thus possibly drawing in more public funding for the agency. Additionally, there will be a store section where users can purchase different items similar to a gift shop but with more relevant items like models of mission components. Again, this would increase interest and profit.



Competitor Analysis			
Competitors	KSA.ke	NASA.gov	SpaceX.com
<b>What is the style of this company's website?</b>	A simplistic design that has mostly only important information that is easy to read. More extensive info available to the user if desired on other pages.	Large amount of images on the main page with little use of negative space. Social media available immediately with news and events a little more off to the side.	Very stylized with very little colour present in the actual design. Contains minimal information on main page but many links to follow.
<b>How does the company interact with the public?</b>	Small presence on social media, mostly through national media announcements.	Wide variety of interaction on many different social media sites. Two most popular are youtube for video and tumblr for photos.	Huge presence on twitter with one or tweets going out daily containing news and information. Currently have around 470k followers.
<b>How effectively does the company show current and past missions?</b>	Will have an interactive map that shows all current missions in surrounding space as well as a couple of informative markers from previous missions. Will have a separate page with more detailed information for each mission.	Has a long list of all missions done by the agency. Clicking on a specific mission will bring you to a page containing all news articles and images available for the mission. A little Wikipedia-esque	Site does not have a dedicated area for a list of missions, instead having an infographic for their current rockets and capsule.
<b>What kind of media does the company's website focus on?</b>	There will be a strong focus on pictures and photos from missions that will populate the majority of the pages. Text will also play a large part in the design of the site.	The site contains about a half and half of image and text that is spread across the pages. On the main page there are quite a number of photos, but on the more technical pages there is mostly just text with a few small images thrown in.	This site has a wide variety of media spread across their pages. They keep much of their whitespace and use no borders to constrain their content.
<b>Is the website able to generate profit?</b>	There will be a store section where users can purchase different items similar to a gift shop but with more relevant items like models of mission components.	There is no visible area where users can purchase any type of products.	The website has a store that contains a wide variety of t-shirts and other outerwear in addition to other accessories like hats and coffee mugs.

## **Client Interview**

### ***What kind of style of website are you looking for?***

It would be great to have a simple layout for the site so that people can get to what they need simply and in the fewest clicks possible; Something similar to the spaceX page but more informative.

### ***What do you think of social media as a way to distribute information?***

I think that it is a great platform for reaching people, but it's not something that we would be interested in using exclusively.

### ***What kind of media would you like to display on your site?***

Mostly informative text with pictures to supplement it.

### ***How in depth would you like the information on your site to go?***

It would probably be best if we could have a varying level of depth for a variety of users, with simpler things showing immediately but if you're looking for something specific, you can find it.





### ***What age range of people are you thinking of reaching?***


Pretty much people of all ages, although I suppose most children under 10 or so wouldn't be overly interested in the page.

### ***What kind of products would you be interested on selling on this site if we include a store page?***

We have some models of our rockets and also general merchandise like what you would find in our gift shop at the complex.

## V. Personas

	<div><b>Name: Bill Kerman</b></div> <div>Most visited websites:</div> <div><ul style="list-style-type: none"><li>• Youtube.com</li><li>• Facebook.com</li><li>• News.bbc.co.uk</li></ul></div> <div>What he expects from a website:</div> <div><ul style="list-style-type: none"><li>• Easy to travel around</li><li>• Only important text; no filler</li><li>• Lots of Pictures</li></ul></div> <div>Computer Usage: 10hrs / week</div> <div></div> <div>Space Knowledge: Knows what a star is</div> <div></div> <div>Online Purchasing: 1 - 2 items a month</div> <div></div>
<p>Education: Bachelor's degree in business Married: No Kids: None Occupation: Air Traffic Controller at the Kerbano International airport</p>	

	<b>Name: Jebediah Johnson</b>
	<p>Most visited websites:</p> <ul style="list-style-type: none"> <li>• NASA.gov</li> <li>• Twitter.com</li> <li>• Engadget.com</li> <li>• Youtube.com</li> </ul> <p>What he expects from a website:</p> <ul style="list-style-type: none"> <li>• All information presented professionally</li> <li>• Easy to look at; not very colourful</li> <li>• Some informative videos</li> <li>• A news section to keep up with the latest information</li> </ul> <p>Computer Usage: 5hrs / week</p> <p>Space Knowledge: He's an Astronaut</p> <p>Online Purchasing: an Item a week</p>

Education: Master's Degree in Engineering  
 Married: Yes  
 Kids: Two  
 Occupation: Astronaut

Computer Usage: 5hrs / week



Space Knowledge: He's an Astronaut



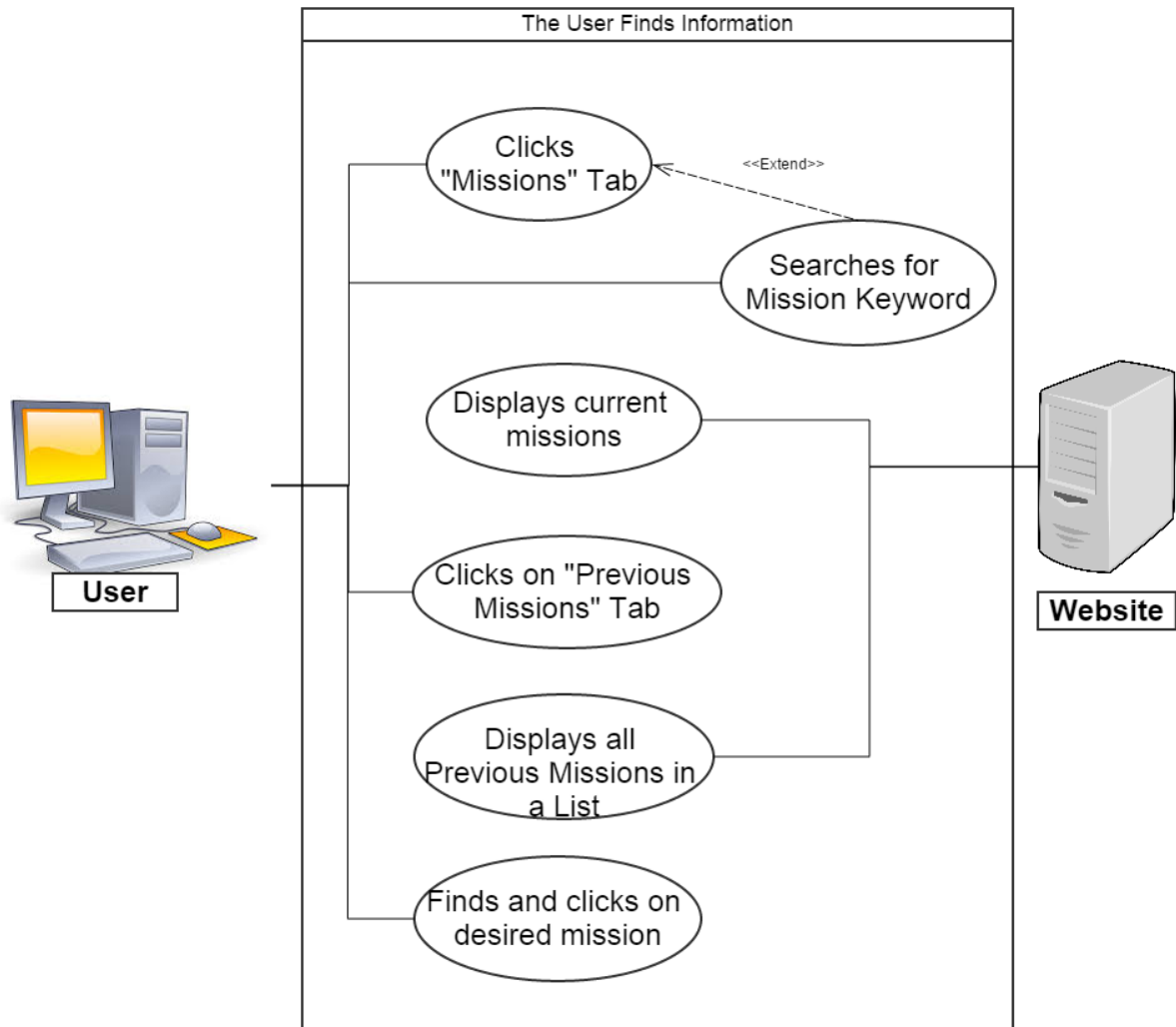
Online Purchasing: an Item a week

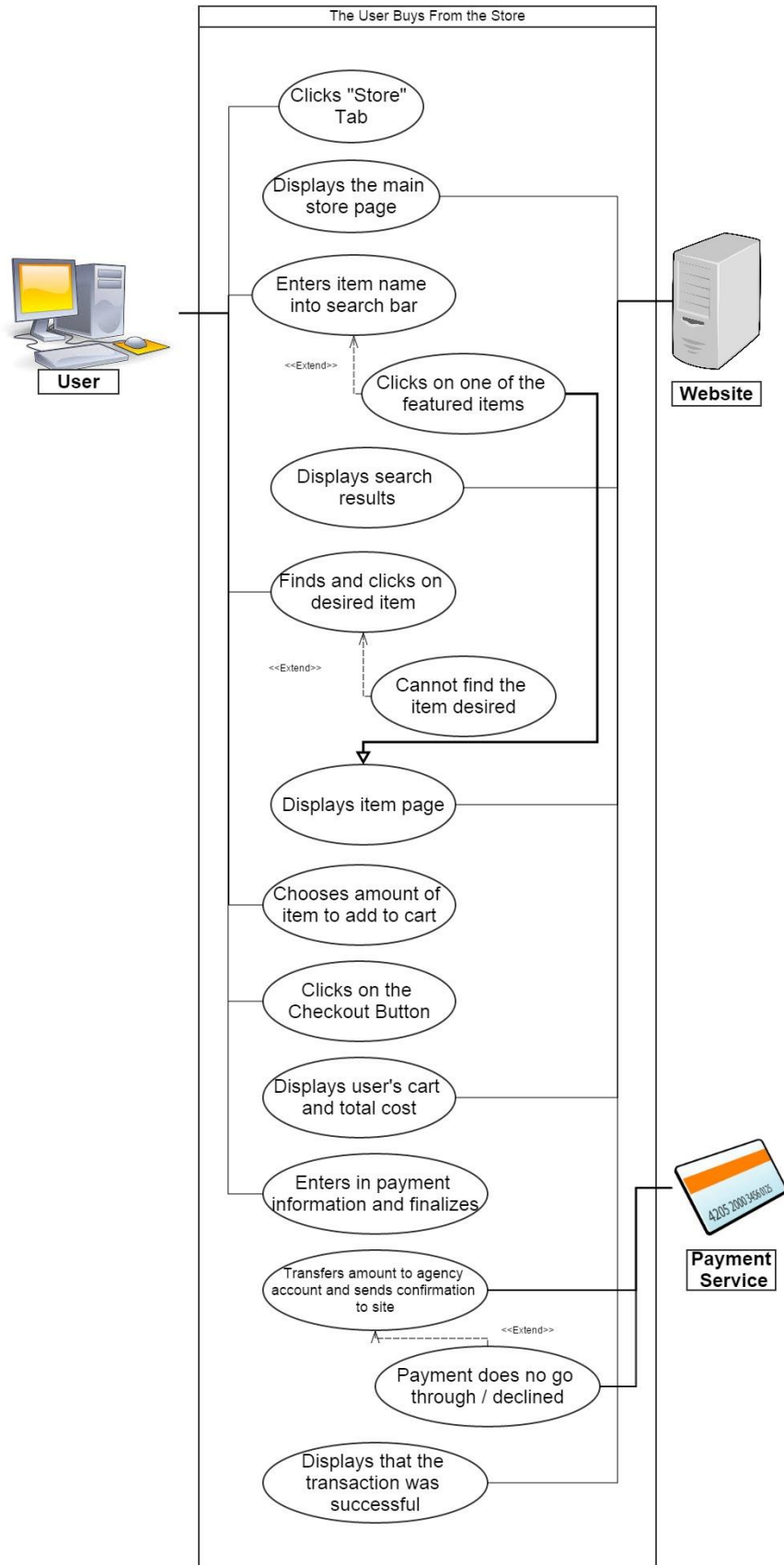


## VI. Use Cases/Scenarios

Use Case Name	User Finds Information for Space Mission
Goal	Find information
Description	User uses a series of buttons on the site in order to navigate to the page and information that they require.
Actors	User, Website
Preconditions	User is on the website
Main Success Scenario	<ol style="list-style-type: none"> <li>1. User clicks on the "Missions" tab on the top of the page</li> <li>2. Website displays the current ongoing missions</li> <li>3. User clicks on "Previous Missions" tab</li> <li>4. Website displays all previous missions</li> <li>5. User finds needed link for mission</li> </ol>
Extensions	<ol style="list-style-type: none"> <li>1a. User Enters the name of the needed mission on the main page's search bar The website will display all the pages related to this entered term; the user's desired mission site will display depending on how accurate his search was. Client continues to 5 if search completed correctly.</li> </ol>
Postconditions	User finds the information he/she needs.

Use Case Name	User Buys Item from the Online Store
Goal	Purchase an Item
Description	User navigates to the store, finds the item(s) that they desire, and finally they check out and pay using the option of their choosing
Actors	User, Website, Payment Company
Preconditions	User is on the website
Main Success Scenario	<ol style="list-style-type: none"> <li>1. User clicks on the "Store" tab on the top of the page</li> <li>2. Website displays the main store page</li> <li>3. User enters in a search term for the item they are looking for</li> <li>4. Website displays search results</li> <li>5. User clicks on item desired</li> <li>6. Site displays the store information page for that item</li> <li>7. User chooses the amount of items added to their cart</li> <li>8. When satisfied, the user clicks the checkout button</li> <li>9. Website displays the user's cart with their items and total cost displayed</li> <li>10. User enters in their payment information and clicks finalize</li> <li>11. Payment Company transferred the user specified amount to the agency and sends a confirmation to the site</li> <li>12. Website displays a successful transaction has taken place</li> </ol>
UseExtensions	<ol style="list-style-type: none"> <li>3a. User clicks on one of the featured items on the main page, skip to 6</li> <li>5a. User cannot find item searched for, either does not exist or the search term did not apply; goes back to 2</li> <li>11a. The payment does not go through/gets declined; the website displays the error to the user.</li> </ol>
Postconditions	User has purchased the items that they desired.





Lansey Kermin, a 20 year old student, is doing a report on one of the more interesting space missions that occurred about 20 years ago. The Kerbal Space Agency was the one running the mission, so their website seemed like a great place to go to gather information. He opened up his laptop and typed “ksa.ke” into the url bar. A quick search of the main page found him a nice big button labeled “missions” and after clicking it he was brought to a bright interactive map showing all of the current missions going on in the solar system. However, he was looking for a mission completed long ago, so a little more looking and he found a tab which brought him to a list of previously run missions. He sorted the list alphabetically and quickly found the exact one that he was searching for. The link brought him to a page full of knowledgeable information along with pictures and video from the flight itself. Now he could finally start on his report.

Sean Kermin, Lansey’s better looking older brother, was thinking about getting one of his friends a gift that had to do with space for his birthday. He heard from his brother that the site he used for his report actually has a store where you can buy exactly what he was looking for! Armed with this information, Sean quickly navigated to the main site and then straight to the store using the nice big shop button. Not being too knowledgeable about space himself, Sean decided to simply pick up a features item from the store. He quickly found a nice “KerbX 9 Rocket” t-shirt which came in a variety of sizes. He quickly chose the right size for his friend on the item’s page and added the item to his cart. He did not need anything else at the time, so he just clicked on the checkout button on the top-right of the screen and has brought to a page where he could enter in his shipping and payment information. After counting his pennies and putting his card information in, and clicked the finalize button. A few seconds pass before a green checkmark appears on screen with the confirmation saying that the package would arrive shortly.



## VII. Word Lists

Timothy Bonin

Project 1: Word Lists

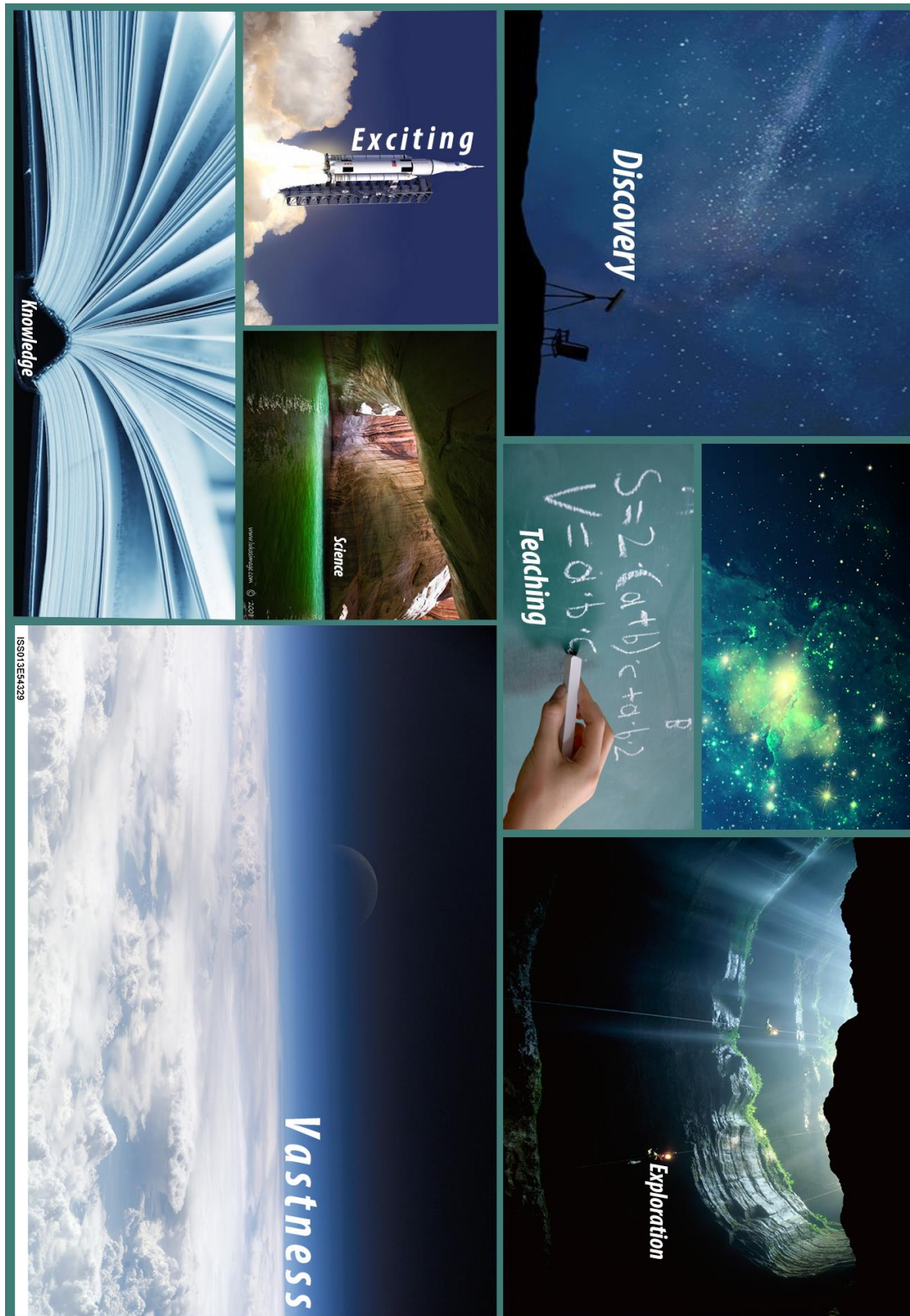
**Topic:** Discovery

Brainstorm –

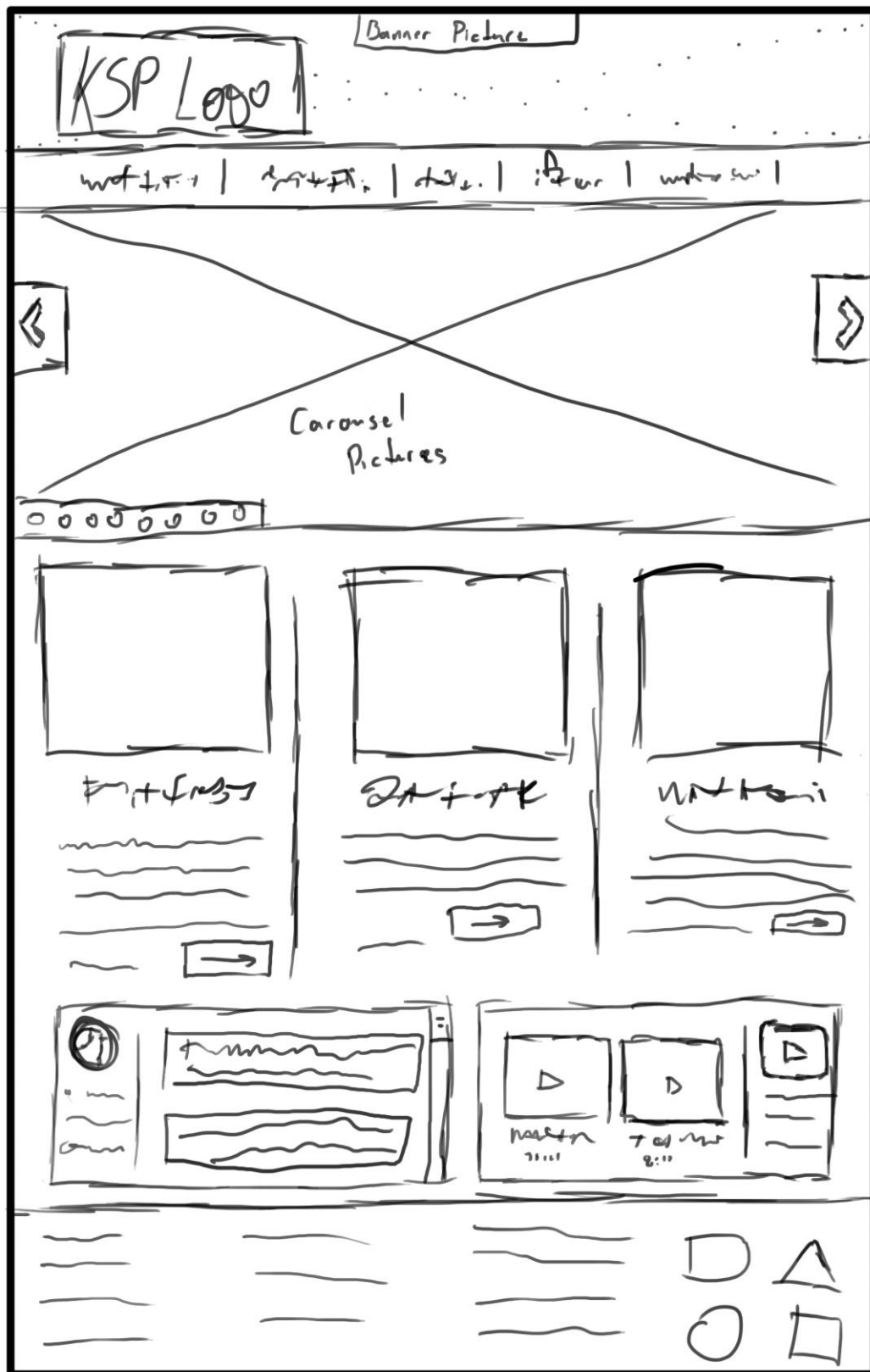
Education, wonder, compassion, exploration, knowledge, exciting, thrilling, new, different, science, contributing, museum, awe, spaceship, open world, hidden, searching, finding, fun, learning, teaching, leading, claiming

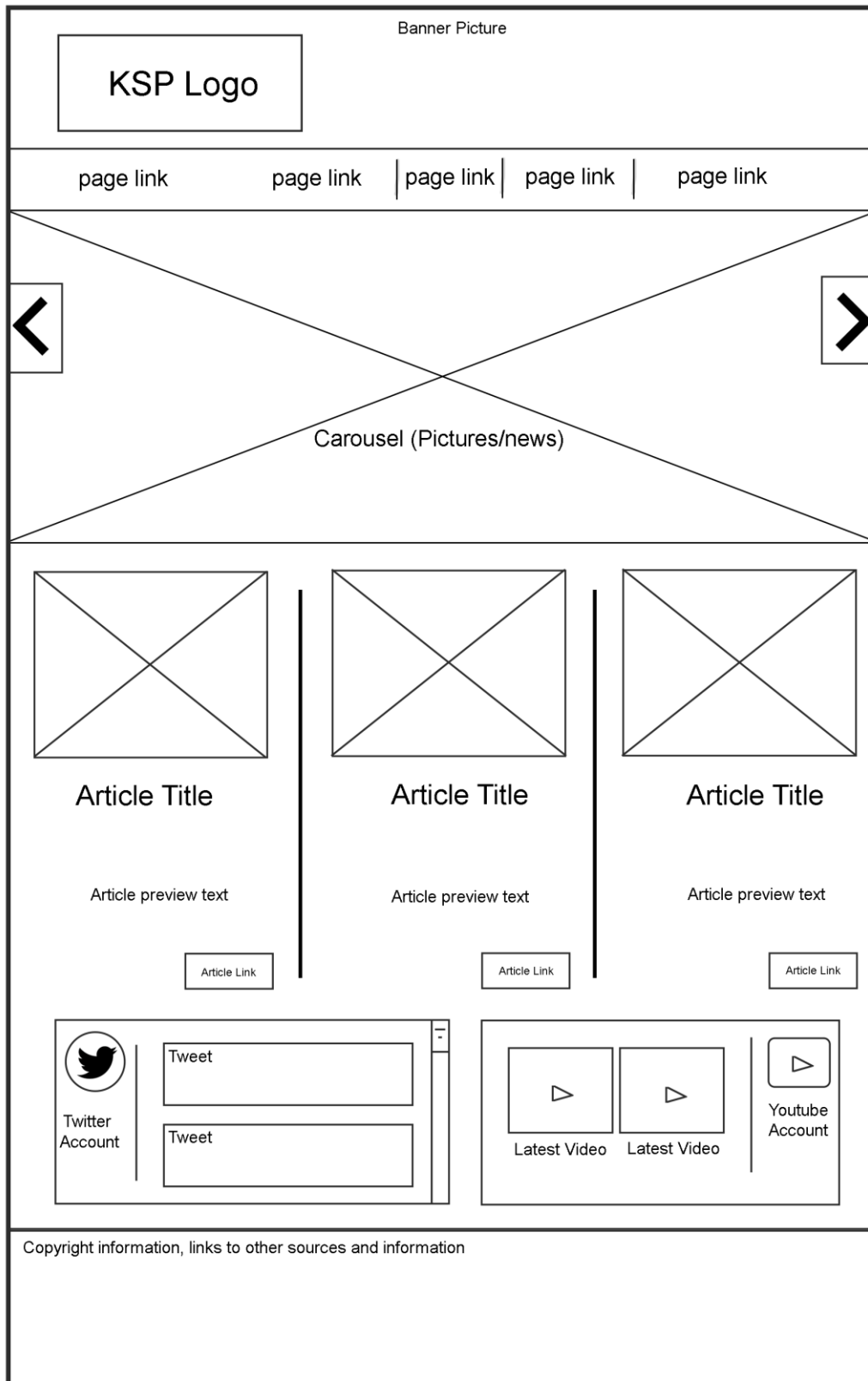
Top Five: Education, Exploration, Science, Teaching, Exciting, Open

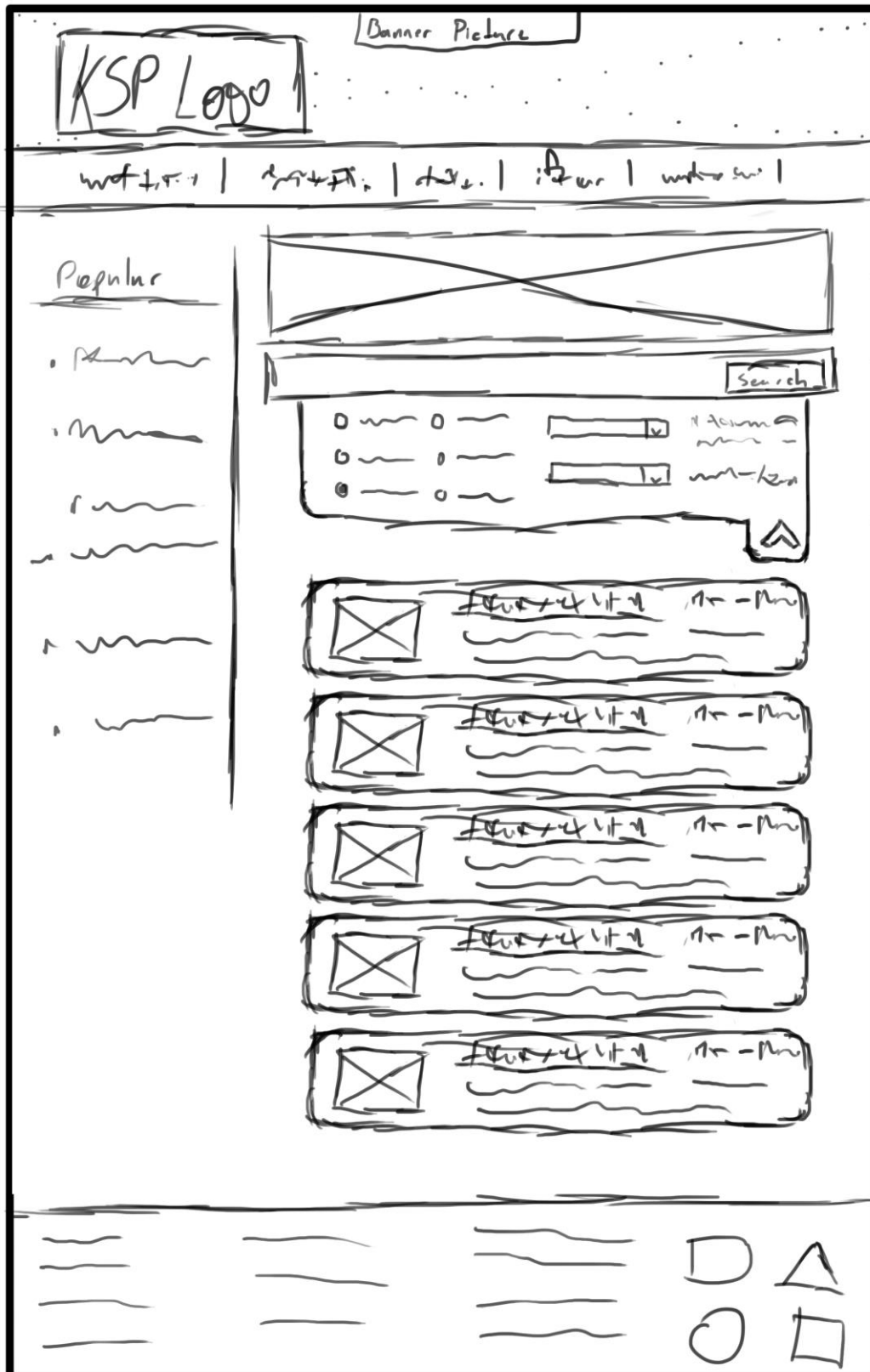
## VIII. Mood Board



## IX. UI Sketches and Wireframes







KSP Logo

Banner Picture

page link

page link

page link

page link

page link

Popular

list of recent popular searches

list of recent popular searches

list of recent popular searches

list of recent popular searches

list of recent popular searches

Search banner picture

Enter search terms here

Search

Dropdown menu with advanced search options

Article

Picture

Page/Mission title

Date(s)

Beginning of the article or small amount of information from it

Article

Picture

Page/Mission title

Date(s)

Beginning of the article or small amount of information from it

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Beginning of the article or small amount of information from it

Article

Picture

Page/Mission title

Date(s)

Beginning of the article or small amount of information from it

Copyright information, links to other sources and information

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## X. Usability Test 1

### Issues / Questions:

For my test, I wanted to know whether the current layout of the two webpages I designed would be successful in getting people where they needed to go on the website. I also wanted to know whether the size and layout of all of the different items were pleasing to the people viewing them. I then wanted to know if the test takers had any suggestions about how to improve the layout or design of the pages that were wireframed.

### Testing Approach

My approach for the testing was to show the two wireframes without text I created to three different people who were pretty adept at browsing websites. I asked each to show where they think they would find both news for the page and also access to the agency's social media pages on the main page. For the other page I asked them to explain what they thought this page was all about (searching). Finally, I simply asked how they enjoyed the size and layout of the actual wireframes.

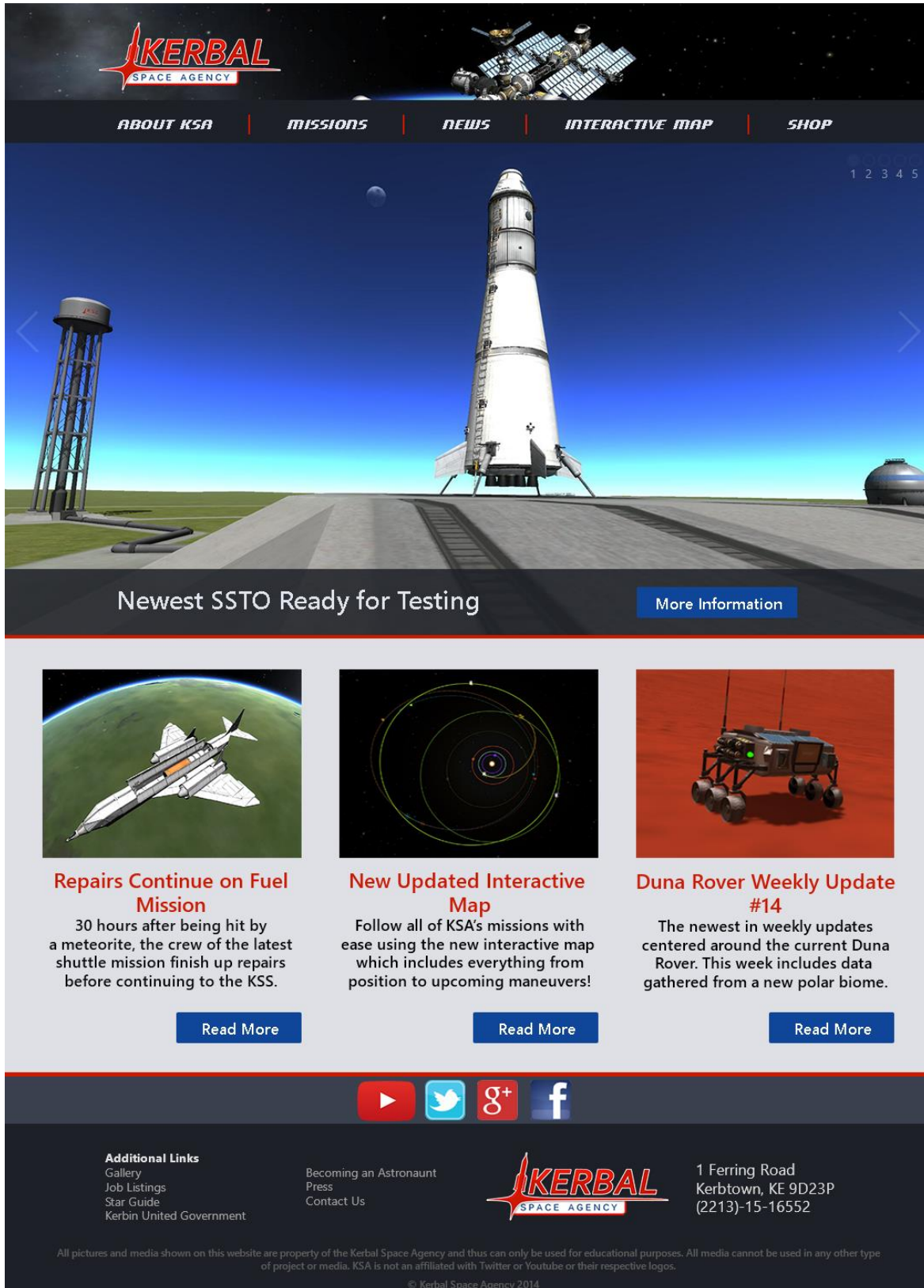
### What I Learned

For the most part, people preferred the smooth and simple single column design, with all three agreeing that the carousel is something that looks good on a modern style webpage. The biggest criticism was with the sizing of some of the elements, as the proportions of each element to the next seem 'off' all around. Because of its simple look, all three people were able to point out the correct elements when asked.

### How I Will Change Things

The biggest thing that seems like needs to be changed is the general sizing of all of the element on the page. I will probably end up sizing everything around the carousel, as that is definitely the main focus of the page. As for the search page, I feel as though simply extending the search results horizontally will make the whole page flow a bit better from top to bottom. I will be keeping the same number of columns though, as the simple feel goes well with the futuristic style of the website.

## XI. Rough Mockups







## XII. Usability Test 2

### Issues / Questions:

For this test, I mostly just wanted to figure out what people thought of the current website design as a whole. I focused less on how the user would interact with the site, as that was mostly covered in the previous test. I instead had the testing individuals focus on how the website looked and felt to them. I needed to know if there were still any major design flaws left, and also that all previous faults with the site's design was covered properly.

### Testing Approach

The way I did this test was almost identical to the way I administered the first in that I simply asked people to look at the two pages I created and point out any design flaws that they saw. I used a total of four people, two being new to the site and two having been part of the first test so that I could both find anything new problems with the design while also making sure that the criticisms of the first test were properly dealt with. I gave each participant about 2 minutes to look over each page and I had them explain how the site made them feel overall and also how they enjoyed the layout of all the individual parts.

### What I Learned

Criticism this time around was very positive, and there were only a few small things that were pointed out at the time of testing. On the main page, the alignment of the "Read more" buttons underneath the articles seems to be 'off' because they were right aligned. All participants agreed the site overall looked more "straight" with them centered. Another small thing was that the mission search box where you enter text seemed like it was awkward and out of place because of its similar colour to the background of the body. Lastly, a small statement was made about the border of the search results seeming like they were too large.

### How I Will Change Things

All of the elements that were discussed will be changed; the aligned of the buttons will be centered, the search box will undergo some rearranging, and the borders of the search results will be changed. As said before, other than these small things the overall reaction to the site was greatly positive, and therefore not much more needs to be changed other than a small tweak here and there.

### XIII. Final Mockups

