

Let Me Think Team 3270

Research Paper

Introduction

Hello, We are team 3270, Let Me Think. We are a veteran team from Huntington Station, New York. Last year, we participated in the Body Forward challenge. We were the caveman guys, if anyone remembers us. During this past season, we have participated in the Food Factor challenge. It seems that the season really has been a challenge, with the new rubric and new score system. However, we have been able to:

- Define a problem
- Create an Innovative Solution
- Share our solution with the community

At the tournaments, we will share our project with the judges, and the entire FLL community. This will fulfill what the challenge wanted, unlike our past seasons.

This year, we actually shared and will continue to share our solution with the community. To find more information about this, please visit our Community page.

We ask you to please enjoy our research paper, and our skit. Thank you for your time!

Research

Chocolate: Our Original Food

During this season, we were challenged with the problem of food safety and contamination. As the FLL challenge book instructed, we started out with a specific food. We selected one of the world's most favorite, chocolate. Then, we looked at the possible contaminants in chocolate. Over the course of our research we have learned that there is a numerous list of factors involved in food contamination such as:

- Melamine
- E.coli
- Salmonella
- Mistakes and machine failure
- There are more, but they are irrelevant.

There have been several instances of contamination to date. For example, back in 2006, Cadbury England recalled seven of their products due to machinery malfunction. The production issues included a leaking pipe, possibly distributing harmful chemicals. Also, in 2006, Hershey Canada released a recall on twenty of their products, claiming there was salmonella poisoning. We contacted Hershey through phone and e-mail regarding this incident, but they declined to comment on the situation.

Another contamination issue we found was in 2008, when the Sherwood chocolate company discovered melamine in their chocolate coins. Although the incident happened in Canada the root of the problem was at the manufacturing plant in China, where many of our food products come from. In the event that a disaster of this scale goes undetected, it could potentially affect the health of both the American, and worldwide populations.

The Grand Realization: There is a Loss of Communication

In pursuit of more information on the Hershey recall of 2006, we reached out to the customer service department for further information. Sadly, we were not given a response. So, we decided to contact the FDA on the matter. They also declined to comment. Once again our attempt to obtain information was met with a dead end. This lack of communication between individuals and companies aroused our curiosity: What is the agenda and more importantly the impact of both big business, and quite possibly our own government, for not releasing detailed information on food recalls in America?

After coming to this inference, we decided to conduct research in other countries' search engines such

thoroughly for food recalls and problems. We think the population deserves universal access to a central data base system for information on produce and manufactured products, listing sourcing of ingredients, manufacturing plant locations, product handling and storage, in addition to other issues.

Solution

Our Initial Idea: A Website

Our team decided that we should create a way to unveil these events in food safety to the public because many food companies may hide food problems from the public's eye view. After brainstorming it occurred to us that the best solution would be to create a website. The website would contain:

- A database driven site to view recent food recalls in the US
- Access any other major recalls worldwide, using techniques like google international searches
- Access to daily articles and links on food warnings and recalls.

Our Second Idea: Codes on Food Products

We discovered that there is another organization that is trying to implement a similar solution in the Netherlands' for the European Union community. We then decided to bump our idea up a notch by putting identifying labels, 3D codes on products.

Not just any labels, but ones that are similar to QR code technology. If scanned, they would launch our website and render information specific to the product such as:

- UPC code
- Lot Number
- What and where if the food product was recalled or had a warning
- Updates to Nutrition Facts in the event of issues regarding ingredients

We were excited to see that a company had a similar idea on how this information can be made available to the world!

“Consumers will soon only have to point their smartphone at the QR code on a food product to receive reliable information on the purity of ingredients, production processes and packaging recycling” (RNW Newsdesk).

Considering the lack of an American counterpart to the Dutch idea, we would love to champion this idea and use it in America. As we described earlier, due to the information shortage between the average American and food companies, we would hope that initially our main target would be Americans, and would eventually grow to be worldwide because of the global footprint of this issue.

The Actual Solution: (Safely) Bringing our Two Ideas Together

As we looked over the two ideas we created, we discovered that they could be put together. We would create a normal food recall and warning website, with all of the features previously discussed. Then, we would implement our 3D code design, so that it would include the features stated above, but also have a link to our website for all recalls, hazards, and warnings related to the given food product. Using the 3D code system gives the consumer a more accessible way to find out information about food.

Implementing Our Solution

The Website and Knowledgebase

As we finalized the idea of our solution, we decided the perfect name for our website:

whatsinmyfood.info

The website's name, "what's in my food" refers to the average consumers' concerns of possible food contamination. We thought that our website will relieve some of that stress. We want to bring all food contamination issues to the public eye, kind've like the Wikileaks of food.

We decided on implementing our website first, as the development and implementation of a 3D code program which may require the government's approval and establish the relationships with food companies.

We first started on the design and content of the website. From this, we decided to create a temporary format that is basic in nature. It looks similar to the political blog, Drudge Report. Blogs like Gizmodo use this style, but we are directly linking to the information on the website. The links will have short descriptions of the story, and if clicked on will direct you to the website. We will also try to feature a daily article, written by one of our team members. Possibly in the future our website will contain an actual archive of food contamination issues. However, the cost to build and maintain this website can be pricey. Here are some costs that it will entail:

- Domain Name (from GoDaddy):
- Software to build the website(Microsoft WebMatrix):Free*
- Storage for website coding(Dropbox):Free**
- Images for the website: Free
- Finding the right guy to program:Free***
- Server:

*You need access to a Windows-running machine, fairly new

**You may have trouble storing all of your materials on the free 2 Gigabytes that are given by Dropbox, so you may need to buy more storage.

***We already have a half-decent programmer on our team

With the funds we have set aside for this website, we project that we can launch it and will be able to run for years. Our funding:

- Fundraisers such as scrapping metal, recycling old electronics, Zumba fundraisers, chocolate sales, etc.
- Our main sponsor, Isworx
- Out of pocket from team members and parents

We have ideas of putting ad-space on our website primarily given to companies who are improving the food safety. They will benefit through advertising, as well as our team earning a profit. Our goal of providing free access to our website for to anyone in the world is our our primary motivation for our fundraising endeavors.

The 3D Codes

We are currently in the early stages of piloting the 3D code system. As of the first competition date, we will have a 3D code for the labels we put on our complementary chocolate souvenirs. The judges will have access to these candies, so they will get a sample of our solution in action.

Basically, the code system will be used as an information source, but the consumer will have access to the website for further information if scanned. We look to become an independent entity that bridges producers and consumers.

Saving the World: Sharing Our Solution

As a result of our of our brainstorming of how to share our solution, our team decided to distribute candies with our team name, project description, and a link to the website. We thought this would be a great opportunity to introduce it to the FLL community. We are also planning a showcase of our website at our local library in March of 2012. We will invite the public and local public representatives.

How Our Solution Will Benefit the World

Although our website will initially target the U.S. Market we hope that it will benefit consumers worldwide. We want our solution to benefit the national community, as well as the international community. To market our solution we are planning to invite the Press to our library presentation. The press can be a great vehicle for our site to make inroads, and gain acceptance with the general public.