

Lab 1 - RocFamily Product Description

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Lab 1 – RocFamily Product Description

1. Introduction

Families have their lives instantly turned upside down upon the diagnoses of pediatric cancer. The pediatric cancer patient and their family can experience feelings of isolation, frustration, stress, and boredom. They may be lacking support, or struggling financially, while dealing with the constraints of their child being constantly hospitalized, typically in an unfamiliar area. In order to assist these patients and their families, Roc Solid Foundation was formed.

Roc Solid Foundation is a non-profit organization who, by their own definition, “builds hope for children battling cancer and their families by offering opportunities for them to do what they do best – play.” Roc Solid Foundation has two programs that provide support and build hope for pediatric cancer patients and their families. Play It Forward provides pediatric cancer patients, between the ages of one and eight, with a custom playset in their backyard and pediatric cancer patients, between the ages of eight and eighteen, with a complete room makeover. Ready Bags provide families of pediatric cancer patients with essentials needed for their unexpected hospital stay. This includes, but is not limited to; toiletries, a blanket, a prepaid debit card, a journal, and a tablet. The Ready Bag does not provide direct support. In addition, the Ready Bag does not provide families with discounts and deals to simplify their lives and ease the strain of financial burden or give access to local events, games, and movies. (Figure 1)

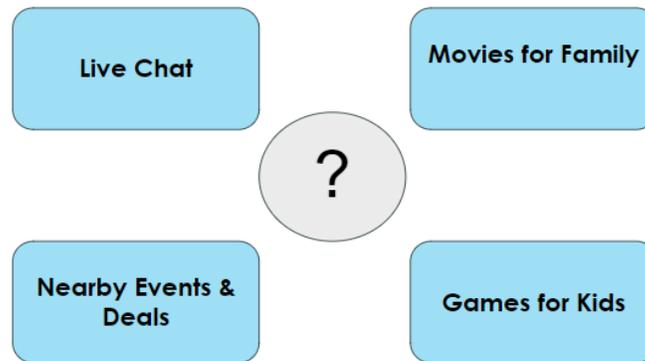


Figure 1: Current Process Flow

The Roc Solid Foundation needs a web application that allows pediatric cancer patients and their families access to support. In addition, Roc Solid Foundation needs the web application to provide pediatric cancer patients and their families with access to events and deals, games, and movies. The solution must provide quick response times to families in need of support. The solution must allow Roc Solid Foundation to maintain an updated database of events, deals, games, and movies. Crimson Team proposes a web application solution called “RocFamily”.

2. Product Description

RocFamily is a mobile web application that will be developed by Crimson Team to provide pediatric cancer patients and their families with a means to communicate, via live chat, with Roc Solid Foundation. In addition, the RocFamily mobile web application will allow Roc Solid Foundation the ability to provide information on events, deals, games, and movies. The RocFamily mobile web application will be compatible with various web browsers including Chrome, Firefox, Internet Explorer, and Safari. The RocFamily mobile web application will come preloaded onto the Roc Solid Foundation provided Ready Bag tablets.

2.1 Key Product Features and Capabilities

There are two major types of user accounts in the RocFamily mobile web application; pediatric cancer patients, and their families, and Roc Solid Foundation staff. The account for pediatric cancer patients and their families will allow the user to launch a live chat with a Roc Solid Foundation staff member. This user will also be able to access updated events, deals, and coupons from the local area. In addition, this user will be able to access age appropriate games and movies, provided via links. Roc Solid Foundation will need administrative access to communicate with these families and to update events, deals, and the links to games and movies.

All users, within the RocFamily mobile web application, will only be able to view information necessary to their role. All RocFamily data will be relevant and updated in real-time. The RocFamily mobile web application will be easy to navigate and provide a user-friendly experience. The process workflow, provided by the RocFamily mobile web application, allows user access to live support and prevents the need to search for activities and discounts in an area they may be unfamiliar with. (Figure 2)

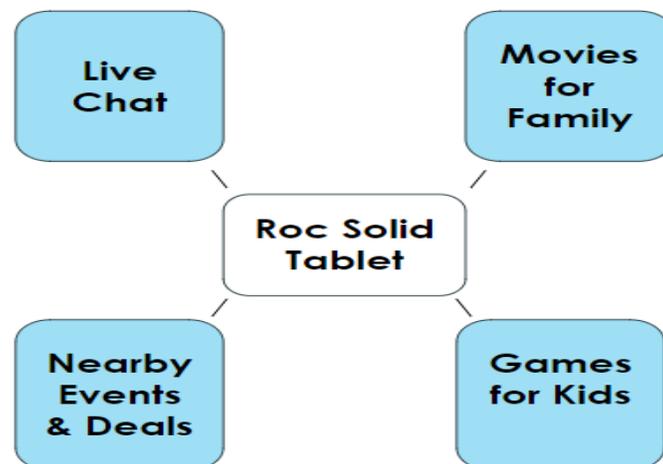


Figure 2: Proposed Process Flow

2.2 Major Functional Components (Hardware/Software)

The RocFamily mobile web application will be developed using HTML, CSS, and JavaScript. The RocFamily mobile web application will run on any browser, alleviating the need for installation. Users will be able to access the web application via their tablet or mobile device, which will increase the

accessibility of the RocFamily mobile web application and reduce the risk associated with low adoption. The RocFamily mobile web application be synced with the RocFamily server for storage of user data, events, deals, and links to games and movies.

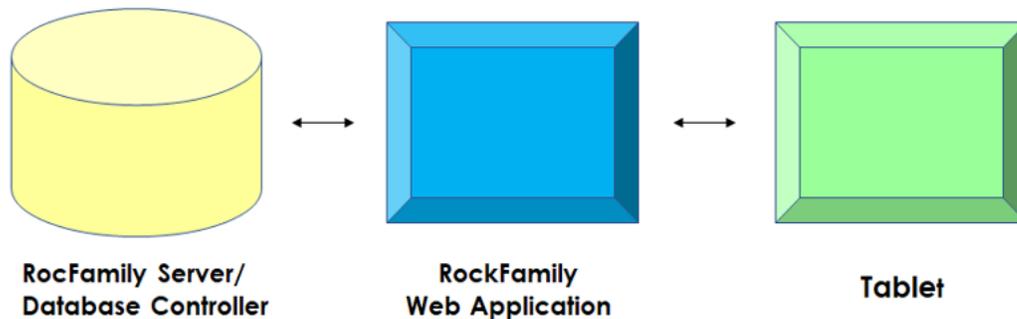


Figure 3: Major Functional Component Diagram (MFCD)

3. Identification of Case Study

The RocFamily mobile web application is being developed for Roc Solid Foundation to provide them with customized tools to aid in their communication with pediatric cancer patients and their families, and to enable Roc Solid Foundation with the capability to provide said families with access to events, deals, games, and movies. Roc Solid Foundation does not currently have the means to provide these services to their client.

There are other websites and mobile applications which handle various aspects of the proposed process flow, however none encompass all the details in which Roc Solid Foundation hopes to provide. CancerCare, Pocket Cancer Care Guide, Simply Sayin', Proton U, and Mobile MyMSK provides users with the ability to look for support. In addition, Proton U provides games for kids. There is no current application for pediatric cancer patients and their families that provides them centralized mental, live chat, and physical, financial and entertainment, support. (Figure 4)

Features	RocFamily vs. Competitors					
	RocFamily	CancerCare	Pocket Cancer Care Guide	Simply Sayin'	Proton U	Mobile MyMSK
Find Games for Kids	✓	✗	✗	✗	✓	✗
Find Age Appropriate Movies	✓	✗	✗	✗	✗	✗
Look for Support	✓	✓	✓	✓	✓	✓
Find Local Events	✓	✗	✗	✗	✗	✗
Find Coupons and Deals	✓	✗	✗	✗	✗	✗

Figure 4: Competition Matrix

The RocFamily mobile web application will be available to patient and their families. In addition, Roc Solid Foundation will have access to the RocFamily mobile web application for uploading events and deal as well as updating links to games and movies.

4. RocFamily Product Prototype Description

The RocFamily product prototype has multiple differences from the RocFamily mobile web application. The differences exist to allow Crimson Team and Roc Solid Foundation the ability to develop, test, modify, and improve the features of the RocFamily mobile web application. The main difference is the “Tester” user account, which will allow Crimson Team and Roc Solid Foundation the ability to act as the pediatric cancer patient or family member using the tablet.

The accounts that will be duplicated between the RocFamily product prototype and the RocFamily mobile web application will be: the Roc Solid Foundation staff/volunteer access which will have the capability of uploading events and deals and have the ability to update links to games and movies, the patient access which will allow the user to link to games and movies, and the family access which allow the user to link to game and movies but also provide the user with access to chat, events, and deals.

Risks involved with the development and use of the RocFamily mobile web application include customer risks: ease of use and low adoption rate, and technical risks: broken links, data security, and automation. These risks are demonstrated below:

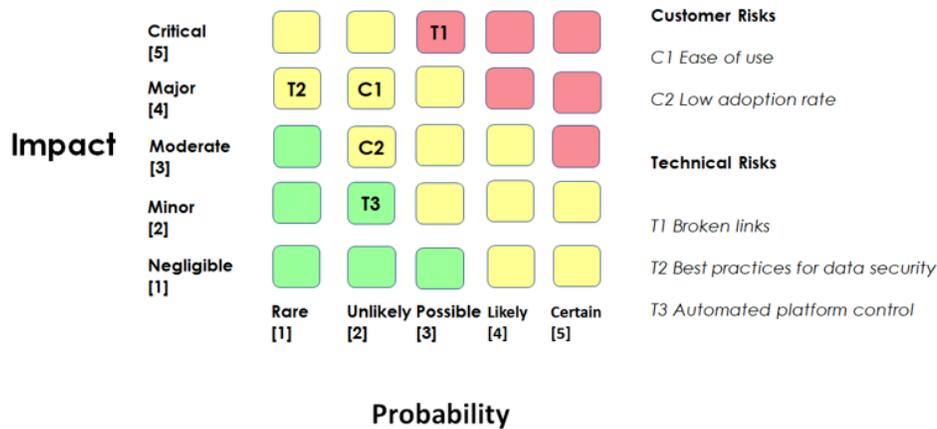


Figure 5: Risk Matrix

4.1 Prototype Architecture

The hardware for the RocFamily product prototype will be hosted on a virtual machine, provided by Old Dominion University. It will incorporate a SQL database server and a web server. The SQL database server will allow storage of user account information, event details, discount information, and a complete list of active links to games and movies. The web server will provide front end access to user accounts, allowing pediatric cancer patients and their families access to event details, discount information, and a complete list of active links to games and movies. These will allow integration with Roc Solid Foundation’s NeonCRM.

Software tools for the RocFamily product prototype will consist of an integrated application for chat functionality, the physical website which is to be updated by Roc Solid Foundation, and an authentication system for validating user’s before they can access chat functions.

4.2 Prototype Features and Capabilities

The RocFamily product prototype chat feature will include the capability to store chat logs, to accept input from users: Roc Solid Foundation staff/volunteers and the pediatric cancer patient and their family, and will provide notifications on incoming chat messages. The RocFamily product prototype will allow Roc Solid Foundation staff/volunteers the ability to create, delete, and update existing events, deals, and links to games and movies. The RocFamily product prototype will provide the end user touch driven interaction with access to chat, events, deals, games, and movies. The RocFamily product prototype will provide secure access via an authentication system.

The RocFamily product prototype will be capable of integration with the Roc Solid Foundation's current database structure. The RocFamily product prototype will present the end user with an event calendar. The RocFamily product prototype will allow real-time access to updated deals, game, and movies.

4.3 Prototype Development Challenges

The RocFamily product prototype and Crimson team face challenges with integration into the Roc Solid Foundation's infrastructure. The RocFamily product prototype also faces the technical risks associated with web application security. In addition, the RocFamily product prototype faces developmental challenges with development, testing, and deployment.

5. Glossary

- Roc Solid Foundation - builds hope for children battling cancer and their families by offering opportunities for them to do what they do best – play.
- Play It Forward – builds custom playsets in the backyards of children ages 1 – 8 fighting cancer and completes room makeovers for children ages 8 – 18
- Ready Bag - includes everything a family might need for their unexpected hospital stay – toiletries, a blanket, a prepaid debit card, a journal, a tablet, and more.
- RocFamily - an application that is preloaded onto the tablet provided in the Roc Solid Ready Bag, which offers comfort support for parents and entertainment for children, during this stressful time in their life.

6. References

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