

Lab 1 – RocFamily Product Description

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Table of Contents

1 Introduction.....3

2 Product Description.....6

 2.1 Key Product Features and Capabilities.....6

 2.2 Major Components.....7

3 Identification of Case Study.....9

4 Product Prototype Description.....9

 4.1 Prototype Architecture10

 4.2 Prototype Features and Capabilities10

 4.3 Prototype Development Challenges.....11

Glossary.....12

References.....13

Figures and Tables

Figure 1: RocSolid Foundation’s current process flowchart.....5

Figure 2: Major functional component diagram..... 8

Lab 1 – RocSolid Product Description

1. Introduction

RocSolid Foundation(RSF) is an organization that strives to build hope for family members and patients that are diagnosed with pediatric cancer. When a patient is diagnosed with cancer the family's entire world shifts to focus on treatment. The treatment normally involves long stays in treatment centers. The time spent in the treatment centers can lead to isolation in unfamiliar environments where it can be difficult when family members when they are looking for support, especially if they are in an unfamiliar town. Many families and patients are facing the unknown while dealing with cancer treatments which can also lead to inflated amounts of stress. Financial struggles can also occur from the unexpected and excessive cost of cancer treatments. Most cancer treatments tend to last for a long time in treatment centers which can lead boredom and long days.

The RocSolid Foundation helps pediatric patients and their families. The pediatric patients are facing a situation that most families and friends are not prepared to face. Once a patient is diagnosed with cancer, everyone involved in the patient's and family's life is impacted and can become overwhelmed. A patient's routine is completely changed while going through their treatment. Not only is a patient in a new and unfamiliar environment but they are also dealing with the pain and distractions caused by the treatment of the cancer. Family members'

and friends’ responsibilities and needs may shift as caring for their patient will become the main priority.

RocSolid assists by creating solutions for the day to day activities for the patients and families. One service that RocSolid provides to their pediatric cancer patients is a ready bag. The ready bag includes important and necessary items that are needed for the patient’s stay at the treatment center. One item that is also included in the ready bag is a tablet. The tablet will be loaded with access to the RocFamily web application. The RocFamily web application is a solution for patient and the family while they are in the treatment center. The RocFamily web application has four sections of the accessible to the families. The first section is a chat functionality with RocSolid staff. The chat functionality will be accessible to family members for help with support during their time in need. A section for movies and another section for games will be included to help ease the boredom of the day to day activities. The last section will include listings for nearby events and deals that are available locally.

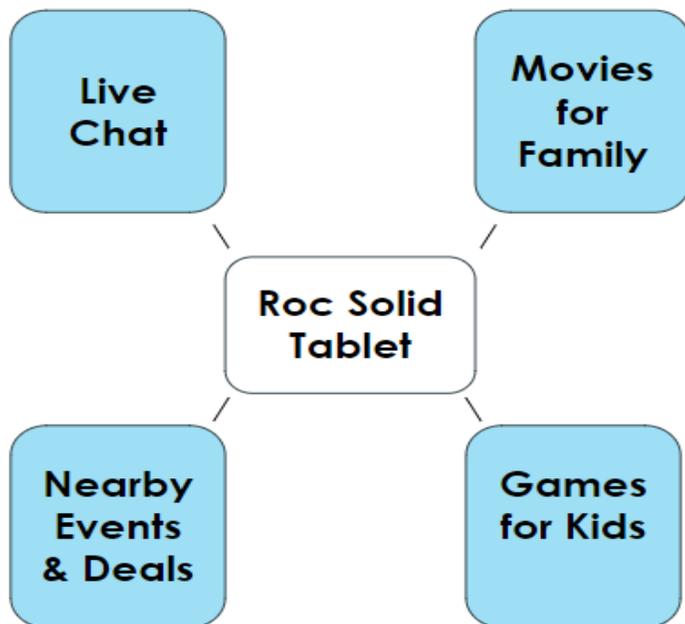


Figure 1: Solution Process flow: This figure illustrates the four major components needed for completion of the project.

2 Product Description

The RocFamily web application is designed to suit the needs of family members and pediatric cancer patients. The application serves four main purposes. The chat program will be integrated and used by RocSolid employees and volunteers to help the patients' families address any questions or concerns they have throughout the process at the treatment center. The chat will be used for moral support for the families and for help with any other concerns or questions. The game links will be directed to multiple sites that host games for entertainment for the families and patients. The movie links will be similar and be directed to multiple sites that host movies for entertainment for the families and patients. The last section that family and patients have access to are the events and deals section that show any local events in the area as well as some discounts to local stores. The web application will also allow access for the RocSolid staff to access the chat function as well as add, update, or delete any information pertaining to the games, movies, events, and deals. The tablet will be either on an iOS or Android platform will come preloaded with the link to the RocFamily login for the website.

2.1 Key Product Features and Capabilities

RocFamily is a website that is compatible with all HTML 5 devices. It will function on Chrome, Firefox, Safari, and Internet Explorer web browsers. This will allow access to website even if not using a RocSolid provided device. This will allow more opportunities for individuals to connect through the RocFamily website.

There will be separate login areas for RocSolid staff members and the family of the patient. After the RocSolid staff members log in, they will be greeted with an area that allows them to create, edit, and delete information for movies, games, events, and deals. They will also have access to a chat function with the family of the patient. The chat function will also have an alert system to notify that the RocSolid staff member if a family is trying to chat with a RocSolid staff member. The RocSolid staff member will be notified that they are trying to be reached. This will allow access to the RocSolid staff at any time for the family of the patient.

The patient and family will have access to the website through a login. The chat login will be a separate login consisting of the same information to access the chat functionality. It will include a convenient and intuitive chat application for families. The entire family will have access to games, movies, events, and deals through a touch interface.

2.2 Major Functional Components

RocFamily can be accessed through Chrome, Firefox, Safari, and Internet Explorer web browsers. RocFamily is a website that is compatible with all HTML 5 devices. This means that not just the provided tablet can be used to access the website but any other online device with HTML 5 access can access the website information. The device used will access RocSolid's server hardware. The server will then access the RocSolid database which holds the RocFamily information as well. The RocFamily database will hold information containing the websites data and algorithms. The customer data will be held on Roc Solid's side of the server.

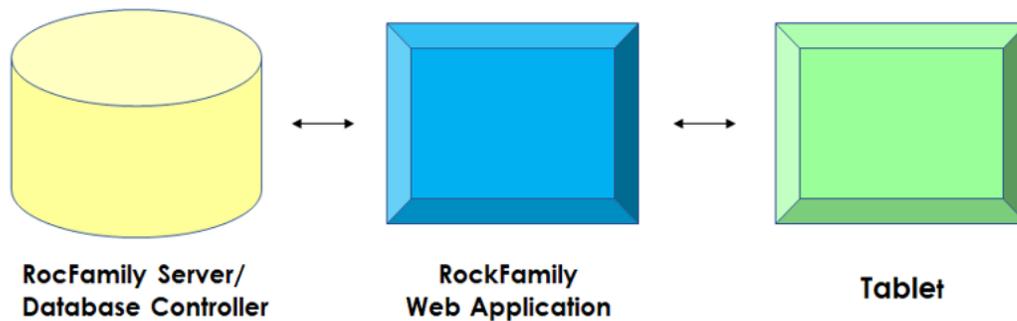


Figure 2: Major Functional Components: The hardware and software components needed for the use of the RocFamily application.

The following software will be used to run the website will need to access and be integrated with the web browser. Chat functionality will be implemented that allows the family to reach the RocFamily staff at any time. The chat will also include the functionality to notify the RocSolid members on duty of an incoming chat session. The chat session will also contain logs of the chat session that can be accessed by the family members and the RocSolid staff members. RocSolid staff members will have access to add, update, and delete the information for the events, deals, movies, and games. The patient's family members will have access to the movies, games, events, deals, and chat. The patients will have will have access to the movies, games, events, and deals. RocSolid staff members will have their own login page for administrator access. The family and patients will log into the website and have access to events, deals, movies, and games. A second log in will be needed for the patient's family members to access the chat functionality.

3 Identification of Case Study

The RocSolid foundation currently focuses on getting RocSolid Ready Bags, room makeovers, and creating playgrounds for the patients and families. The RocSolid website currently does not have any activities for the family or the patients nor is there a quick way to reach out to a RocSolid staff member while they are staying at a treatment center. Through RocFamily, some of these issues are resolved.

If parent of a patient is upset or needs advice the RocFamily Chat program would give access to the RocFamily support staff at any time. The movies and games that are available would prove to be a valuable distraction for and family member or a patient that is bored or in pain. The events that are local could give the family opportunity to escape for a brief time from the life in the treatment centers. The deals offered on the RocFamily website could promote local businesses while reducing the financial burden that most families feel when an individual is ill.

4 Product Prototype Description

The RocFamily prototype will be close to the final version of the website. The priority will be getting the chat functionality working as the main objective. The games, movies, events, and deals are the secondary focus of the deliverable items. The prototype will consist of users, administrators, and testers that will focus on testing the websites functionality. Various levels of access will be give to each member class and will be tested accordingly.

During the prototype phase there will be multiple simulations. There will be simulations with RocSolid database access and access rights of different users. There will be stress test on all inputs that are to be created, edited, or deleted by the administrator users. Chat will be tested to

ensure that it is functional on both the user and administrator side of the server. User access test will also be used to test the functionality of interacting with the website which will be simulated remotely and on-site.

4.1 Prototype Architecture

The prototype's hardware needed will be very similar to the hardware that is needed. The initial testing will be on a database server with access to Old Dominion University's computer science web server. We will also have access to a virtual machine running on Ubuntu. We will be able to simulate working with RocSolid's servers and will be able to access the platform remotely using Chrome, Firefox, Safari, and Internet Explorer web browsers. All the data stored on the test server will be dummy data that is generated.

4.2 Prototype Features and Capabilities

The software will be used to run the website will need to access and be integrated with the web browser. Chat functionality will be implemented that allows the family to reach the RocFamily staff at any time and be tested by submitting test at various times checking to see what the output of the chat results are by the tester. The chat will also include the functionality to notify the RocSolid members on duty of an incoming chat session and will be tested by observing incoming notifications. The chat session will also contain logs of the chat session that can be accessed by the family members and the RocSolid staff members and will be checked by accessing and verifying the log data. RocSolid staff members will have access to add, update, and delete the information for the events, deals, movies, and games with testing being done checking multiple scenarios surrounding the add, update and delete commands for the administrator. The patient's family members will have access to the movies, games, events,

deals, and chat where testing will be done on the user interface's usability. The patients will have access to the movies, games, events, and deals where testing will be done on the user interface's usability. RocSolid staff members will have their own login page for administrator access where the login will be tested. The family and patients will log in the website and have access to events, deals, movies, and games access where the login will be tested. A second login will be needed for the patient's family members to access the chat functionality access where the login will be tested.

4.3 Prototype Development Challenges

There will be a few challenges that the team must overcome in to deliver RocFamily. The group must work together to make sure that the teams vision aligns with the vision of RocSolid. If we do not update RocSolid staff with our progress nor ask for feedback our final product may not match what was requested. The team must also work closely with RocSolid to make sure that RocFamily successfully integrates with the database information. The team must be able to successfully transmit data with the RocSolid servers.

Glossary

PHP: Server scripting language

MySQL: Relational database management system

Apache2: Web server

RSF: RocSolid Foundation

iOS: A mobile operating system made by Apple

Android platform: A device which uses an Android operating system

RocSolid Foundation: Foundation that builds hope for patients battling cancer and their families

RocSolid Ready Bag: Includes everything a family might need for their unexpected hospital stay

RocFamily: An application that is preloaded onto the tablet provided in the RocSolid Ready Bag

References

Building Hope. (n.d.). Retrieved February 01, 2018, from <http://rocsolidfoundation.org/>