Lab 2 – RocFamily Product Description

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1. Introduction

The RocSolid Foundation (RSF) is an organization that strives to build hope for family members and pediatric patients that are diagnosed with pediatric cancer. When a child 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 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.

The RocSolid Foundation was founded by Eric Newman who is a cancer survivor himself. His goal for the RocSolid Foundation is to help pediatric patients and their families. The pediatric patients endure a situation that most families and friends are not prepared to face. Once a patient is diagnosed with cancer, everyone involved is impacted. 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 the pediatric 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 website

contains four features. The first feature 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 feature for movies and another feature for games will be included to help ease the

boredom of the day-to-day activities. The last feature will include listings for nearby events and
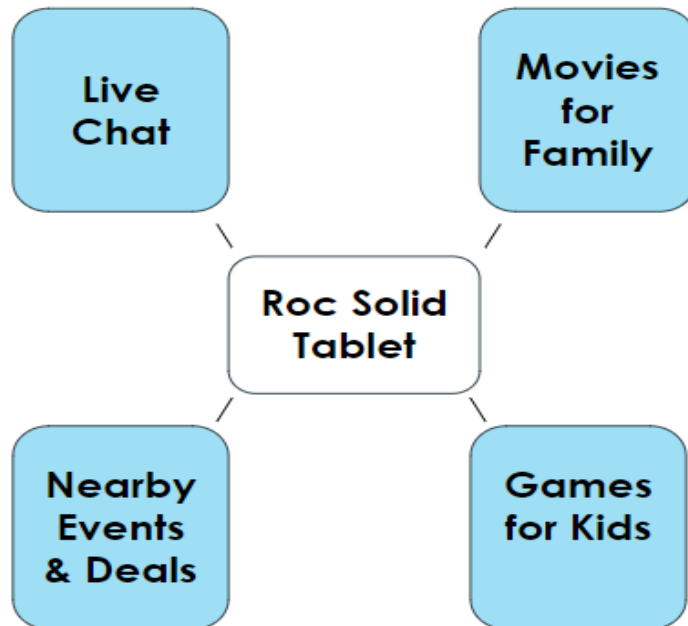
deals that are available locally.

Figure 1 Illustration of solution process flow

1.1. Purpose

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 staff to assist the patients' families by immediately addressing

any questions or concerns they have throughout the treatment process. The chat will be used for

moral support for the families and immediate help with any other concerns or questions.

RocSolid will also maintain links for games, movie sites, events, and deals. The game links will

be directed to multiple sites that host games for entertainment for 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 feature the family and patients have access to are the events and deals feature that show any local events in the area as well as some discounts to local retail locations. 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 operating system will come preloaded with the link to the RocFamily login for the website.

1.2 Scope

RocFamily is a website that is compatible with all HTML 5 devices. It will function on Google Chrome, Safari, and Internet Explorer web browsers. The additional capability of supporting web browsers will allow more opportunities for individuals to connect through the RocFamily website not just only using the tablet device given by RocSolid.

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. The chat function will alert system to notify that the RocSolid staff member when 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. For security the chat login will be a separate login consisting of the same information to access a convenient and intuitive chat application for families. The entire family will have access to games, movies, events, and deals through a touch interface.

1.3 Definitions, Acronyms, and Abbreviations

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

1.4 References

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1.5 Overview

        This product specification details the goals of the Rocfamily prototype. It provides a

foundation of the project's goals. The specification relies upon the design of the website

interface to closely align with the final product design. The prototype's final form should be

close to the final form of the real-world product. The list of requirements will match the ones that

are needed for the final product.

2 General Description

  RocFamily can be accessed through Google Chrome, 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 can access the website information. The RocSolid database include the RocFamily

database. The RocFamily database will hold information containing the website's codes, tables,

and algorithms. The customer data will be held on RocSolid's server.

RocSolid Server

RocFamily Internet Accessible Device

- Compatible with Safari
- Compatible with Chrome
- Compatible with Internet Explorer

RocFamily Server

- Shared with RocSolid server

RocFamily Database

- Chat functionality algorithms
- Password algorithms
- Web development algorithms
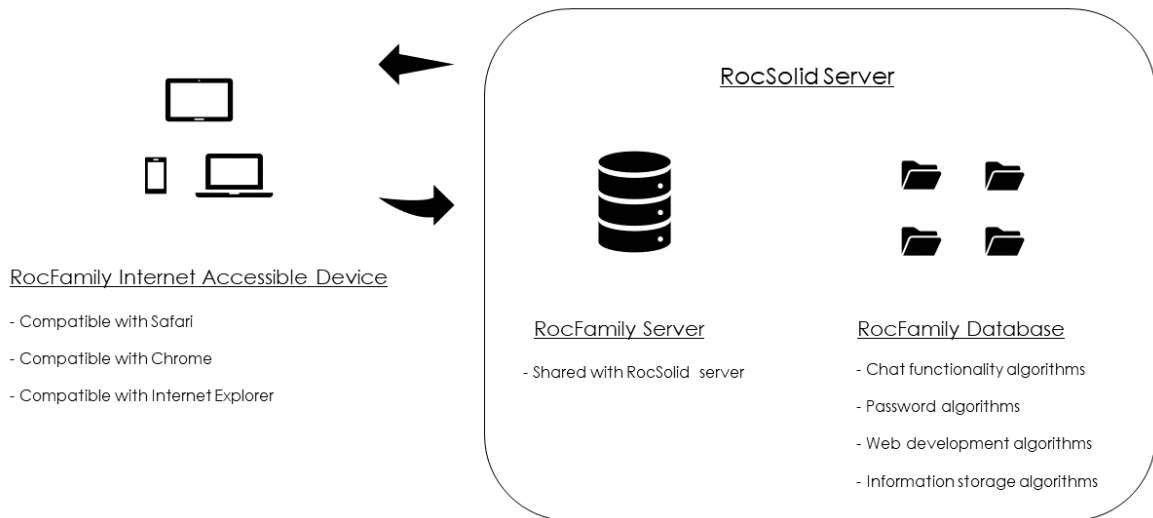- Information storage algorithms

Figure 2 Illustration of major functional components

  The RocFamily chat program will also include a notification algorithm to notify the

RocSolid members on duty of an incoming chat session. The chat session will also contain

record keeping of the chat session that can be accessed by the family members and the RocSolid

staff members. RocSolid staff members will have access to a user interface that allows staff members to add, update, and delete the information for the events, deals, movies, and games information on the RocFamily server tables. Pediatric patients and the patient's family will have access to a user interface that will include the movies, games, events, deals, and chat. RocSolid staff members will have a user interface login page for administrator access.

2.1 Prototype Architecture Description

The RocFamily prototype will be close to the definitive version of the of what will be on the final RocSolid server. The priority will be getting the chat functionality. The games, movies, events, and deals are the secondary focus of the deliverable items. The prototype will be hosted on the ODU compute science servers and will contain the dummy data that will be used to test the functionality of the prototype.

2.2 Prototype Functional Description

The prototype's hardware needed will be like the hardware that is used on RocSolid's server. The initial development will be on a database server with access to Old Dominion University's computer science web server. There will be a virtual machine running on Ubuntu. This will allow the ability to simulate working with RocSolid's servers and will be able to access the platform remotely using Google Chrome, Safari, and Internet Explorer web browsers. All the data stored on the test server will be dummy data that is generated. The software will be used to run the website will need to access and be integrated with NeonCRM.
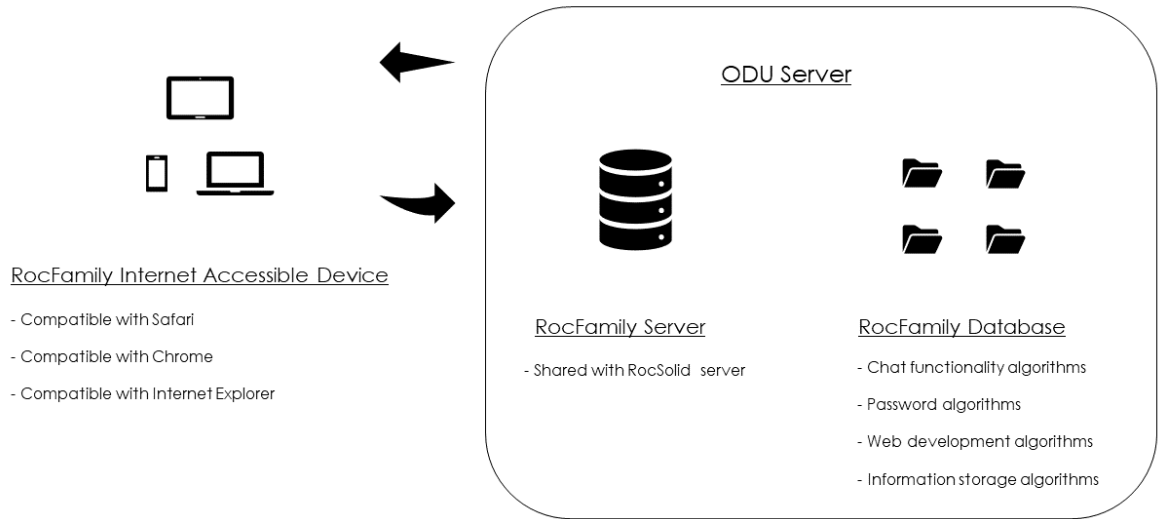
Figure 3 Illustration of major functional component prototype

2.3 Extended Interfaces

The RocFamily Prototype will be like the final software that that will be hosted on the RocSolid server. The primary difference between the prototype and the final version will be that the prototype will use dummy data that is hosted on the virtual machine hosted on the ODU computer science servers. The prototype will have the same chat, event, deals, movies, and games functions. Fake database data will be used for the prototype testing. integrates with the database information. The team must be able to successfully transmit data with the RocSolid servers.