

Lab 1 – RocFamily Product Description

Matthew Hall

Old Dominion University

CS411W

Janet Brunelle

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## Lab 1 – RocSolid Product Description

**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.

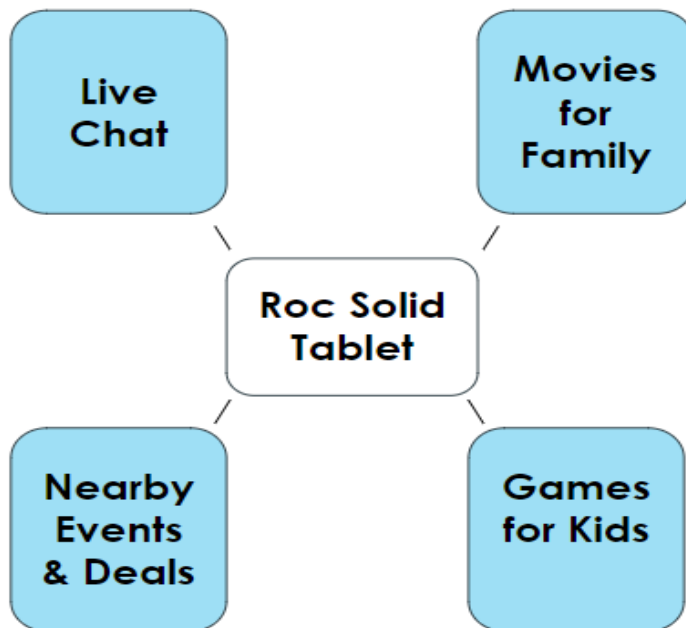


Figure 1 Illustration of solution process flow

## 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 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.

### **2.1 Key Product Features and Capabilities**

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.

### 2.2 Major Functional Components

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.

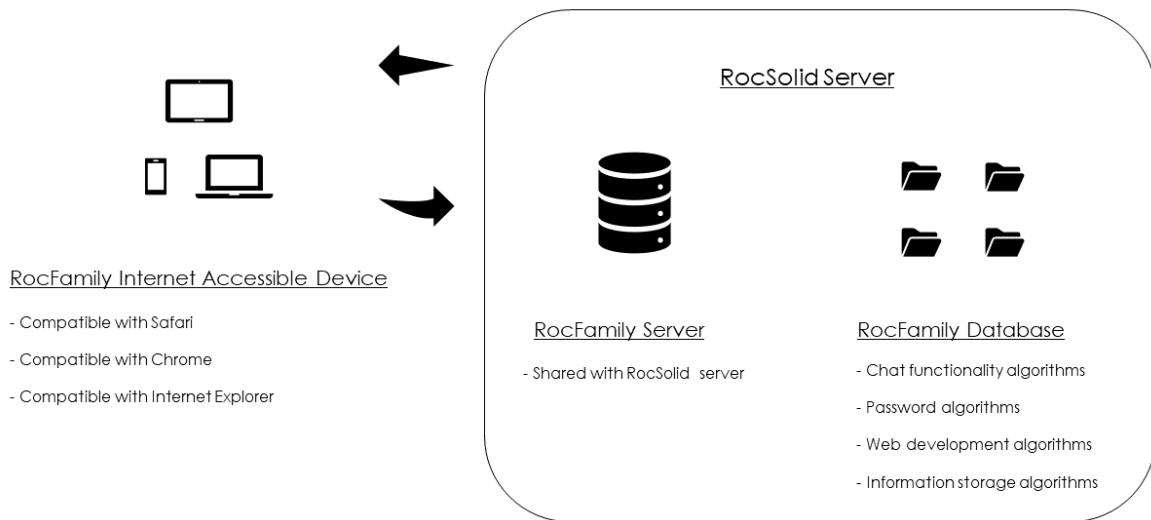


Figure 2 Illustration of major functional components

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.

### 3. Identification of Case Study

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 the RocFamily website these issues are resolved. The RocFamily application is necessary is that no other researched application available offered these features. No other application offers a chat program would give access to the support staff at any time while also providing options for movies, games, deals, and events.

Roc Family vs. Competitors		Roc Family	CancerCare	Pocket Cancer Care Guide	Simply Sayin’	Proton U	Mobile MyMSK
Find Games for Kids	✓	x	x	x	x	x	x
Find Age Appropriate Movies	✓	x	x	x	✓	x	x
Chat Function	✓	✓	✓	✓	✓	✓	✓
Find Local Events	✓	x	x	x	x	x	x
Find Deals	✓	x	x	x	x	x	x

Figure 3 Competition matrix

#### **4. Product Prototype 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.

##### **4.1 Prototype Architecture**

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.



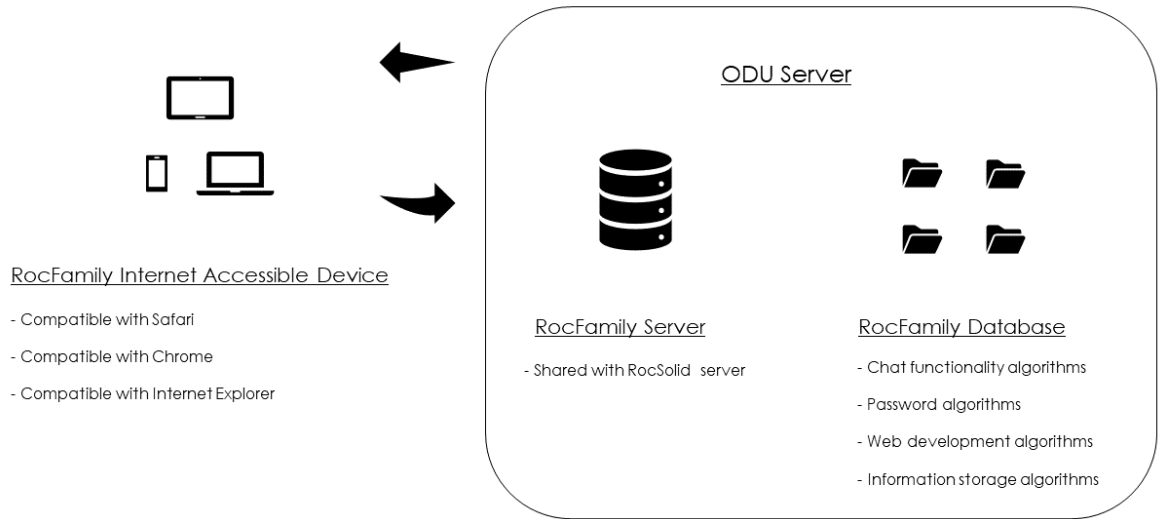


Figure 4 Illustration of major functional component prototype

### 4.2 Prototype Features and Capabilities

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.

### 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. 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/>

RocFamily. (n.d.). Retrieved February 21, 2018, from <http://www.cs.odu.edu/~411red/>

CureSearch CancerCare App | CureSearch. (n.d.). Retrieved October 20, 2017, from  
<https://curesearch.org/CureSearch-CancerCare-App>

Pocket Cancer Care Guide. (n.d.). Retrieved October 20, 2017, from

<https://www.canceradvocacy.org/resources/pocket-care-guide/>

Simplysayin. (n.d.). Retrieved October 20, 2017, from <http://www.mediakube.com/simplysayin/>

University of Florida Health Proton Therapy Institute. (n.d.). Retrieved October 20, 2017, from

<https://www.floridaproton.org/patients-families/pediatric-app/>

Mobile MyMSK. (n.d.). Retrieved October 20, 2017, from

<https://www.mskcc.org/experience/become-patient/patient-portal-mysk/mobilemysk>