**CS 246 Individual Project Report**

Your Name: Rochak Kunwar

Your Team: Team 10

07/17/2019

# Project Summary

[Summarize the project including:

* Name of the project: **Breather of Life**
* Sponsor Name: **Stacy Jones**
* Short description of the application: It is a meditation app which helps you breathe. It is useful for meditation as well as sleeping in night.

Populate the table below for each of your features (required and stretch requirements) of your application:]

|  |  |  |
| --- | --- | --- |
| **Feature** | **Status**  **(Complete, Partial, None)** | **If not complete, explain what is missing and what steps are needed to complete it.** |
| Setting | Complete |  |
| Custom | Complete |  |
| Launching each activity/exercise | Complete |  |
| Animation in breathing pattern | Complete |  |
| Music and Vibration | Complete |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# Project Demo Video

[***Online students only***, provide a link to the demo video of your project. You can create one video for the entire team to share. This video should be posted as an unlisted or public video on YouTube (not private) or Vimeo. Please do not use another video hosting service and make sure you test that everyone on your team can see the video without using a password. The video should be 5 – 7 minutes long, describe the sponsor, the purpose of the app, show off major features you are particularly proud of, describe any major technical challenges you faced and what you did to overcome them. You should also share this link in Slack for other students in the online class to view.]

# Project GitHub Repo

[Please include a link to your team project GitHub repo here. If the repository isn’t public, make sure your instructor has read access to it.]

# https://github.com/Scotty-Pierce117/breathoflifeProject Design

## Design Patterns in your Project

[Describe the Design Patterns that were used in your project. Explain why they were selected.]

Observer pattern because we have a main class which action will define the action of exercise class. And the action of exercise class will function according to other class associated with each exercise type. So our exercise is dependent on different exercise type classes. (eg: meditation, pump-up, custom, and workout).

## Future Design

[If you were to re-design your project, what changes would you make? Would you use different design patterns? Give reasons why you would make these changes.

Possible things to consider when you determine a re-design: code that was not working, features you weren’t able to implement yet, new features you just came up with, increased reusability of the code (i.e. remove redundant code), and improved code organization.

Create a new proposed UML diagram of the project and add it here (this is your personal design not a team developed design). Remember to add all relationships between the classes and include key member data and functions. You may need to break your design up into multiple diagrams.

This part of the report is important part of your project grade.]

# The scope of the project is really small and makes it difficult to expand. Instead of expanding I will like to make it just a real time meditation app with voice assistance which will just say “breath-in” and “breather-out” in a pleasant voice. I will exclude the vibration function from the app and leave just a background music with voice assistance.

For making it real time I will want to use some time of device like smart watch that can read your heart beat rate. The result of heart beat will be sent to the app and will act accordingly to redesign the breathing pattern to go to the optimal breathing phase. Based on your heart beat rate it will take you from that breath-in and breath-out phase to the breathing pattern that you need for meditation.

Also the total time of the transition or frequency of changing breathing pattern will be taken optimum so the user can go from current phase to meditation phase in lest amount of time. This will be done by working together with exercise specialist.

# A close up of text on a white surface Description automatically generated

# The new designed app will be the half MVC pattern and Half observer pattern.

There will be some sort of mapping needed when we will pull data from heart beat rate calculator machine. Also we will need some classes when we pull data from news API. That will work as a controller in our new app. And the music selection will work just like setting is working now. It will redirect us to music activity when we will click music in main activity.

# Project Evaluation

[Using the rubric provided in Canvas (<https://byui-cs.github.io/CS246/week-14/project-rubric.pdf>), evaluate your project on each of these criterion and calculate an average score. Your self-evaluation is used as an input into the final grade of the project.]

|  |  |
| --- | --- |
| **Criterion** | **Score (100% - 0% based on the rubric)** |
| How well does the project work? (35%) | 100% |
| How well does the project fulfill its requirements? (25%) | 90% |
| How well does the code embody good design principles and patterns? (10%) | 100% |
| How beautiful is the code? (10%) | 100% |
| How well documented is the code? (10%) | 90% |
| How well was version control used? (10%) | 100% |
| **Your Self-Assessed Score**  **based on the Weights in the Rubric:** | 95% |

[Provide background information about why you evaluated the project in the way that you did.]

# The main part is that the app works and fulfills the requirement it needs to do. All the codes are running without any exception. But there is some problem in the breathing pattern and animation. It just feels like it’s not smooth and we can make it lot better by consulting with some exercise science people. And the code can be documented a lot better. But there is enough logs for testing.Individual Contribution

[Describe what your role on the project was. Provide a time breakdown (see table below) for your contribution to the project. You should be able to look at your previously submitted status reports to get this data. Depending upon the semester, you may or may not have any hours to report in Week 14.]

|  |  |
| --- | --- |
| **Week** | **Total Hours**  **(Rounded)** |
| Week 02 | **0** |
| Week 03 | **0** |
| Week 04 | **0** |
| Week 05 | **1** |
| Week 06 | **1** |
| Week 07 | 5 |
| Week 08 | 5 |
| Week 09 | 10 |
| Week 10 | 5 |
| Week 11 | 10 |
| Week 12 | 10 |
| Week 13 | 5 |
| Week 14 | 0 |
| **Total** | 52 hrs. |

# Team Member Contribution

[For each member of your team including yourself, provide a score for Participation (0-3 where 3 is highest), Responsibility (0-3 where 3 is highest) and Value Added (0-4 where 4 is highest). You are not ranking individuals. It is possible that multiple people (or all people) on the team can have the same score for each of these qualities. This information will be kept confidential. Your evaluation of your team is used as an input into the final grade of the project.]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of Teammate** | **Participation**  **(0-3)** | **Responsibility**  **(0-3)** | **Value Added**  **(0-4)** | **Total Points**  **(0-10)** |
| Rochak Kunwar | 3 | 3 | 4 | 10 |
| Grayson Jones | 3 | 3 | 4 | 10 |
| Nathan | 3 | 3 | 3 | 9 |
| Scott Pierce | 3 | 3 | 3 | 9 |
| Name 4 |  |  |  |  |

[Provide background information about why you evaluated team members in the way that you did.]

Grayson Jones- He was responsible for designing the UI. With the help of Nathan he completed most of the animation and designing in app. He did great on those.

Nathan: He had his things going on. He designed and contributed few things in app interface. He was busy but he was doing his assigned job on time.

Scott Pierce: He was up to date in submitting the writing homework for team. But he didn’t complete his assigned task until last week. He doesn’t want to learn; he wants to get things done within few hours.

# Summary

[Summarize your experiences (good and bad) on this project. What lessons did you learn from the experiences that you can apply to future projects including future internships and employment? As you take additional software engineering courses, what questions regarding software development processes and team dynamics do you want to seek answers for? Your well thought out summary is an important part of your grade on the project.]

Group project can be tough because we have to decide as a group. Sometimes we have to do things even though we don’t want to do it. The most important lesson that I learned is it is very important to be in a team that purists for higher. It is good to be in between self-motivated people.   
  
It will be hard to collaborate with co-worker who just works to get paycheck but do not want to grow further. In college it can be difficult because we all have different favorites topics and subject that we want to explore more. But may be while choosing job we got to choose what interests us so we can give as well as learn.