Requirements Document for Senior Project

By Evan Hack

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++Appearance requirements++

Non-Functional **ID Number:** #1 **Type:** Look and Feel **Description:** The product shall be attractive to all users. **Rationale:** To be able to have users use the product. **Fit Criterion:** Users without prompt or enticement will want to use the product. **Priority:** 5 **Dependencies:** None

++Ease of Use requirements++

Functional **ID Number:** #2 **Type:** Usability **Description:** The product shall be easy for users to use. **Rationale:** This allows users to be able to use the product efficiently. **Fit Criterion:** More than 50% of senior citizens will be able to complete all tasks the app provides in under five minutes. **Priority:** 7 **Dependencies:** #4, #5, #6, and #7

++Personalization requirements++

Non-Functional **ID Number:** #3 **Type:** Usability **Description:** How the product can be altered to give users personalization. **Rationale:** It will allow users to have a personal feeling towards the product. **Fit Criterion:** Users will be able to have their own personal product with their own choice of personalization. **Priority:** 4 **Dependencies:** None

++Learning requirements++

Non-Functional **ID Number:** #4 **Type:** Usability **Description:** The product will be easy for users to learn how to use. **Rationale:** It allows the app to be used to its full potential. **Fit Criterion:** The average blue collar worker will be able to use the product properly without trouble. **Priority:** 8 **Dependencies:** #5, #6, and #7

++Understandability and Politeness Requirements++

Non-Functional **ID Number:** #5 **Type:** Usability **Description:** Users will be able to understand how the product will help and benefit them. **Rationale:** It will allow users to feel more in tune of what benefits they will gain from the product. **Fit Criterion:** Users will understand the product in terms of how it benefits them through an information button. **Priority:** 8 **Dependencies:** None

++Accessibility requirements++

Functional **ID Number:** #6 **Type:** Usability **Description:** Users who suffer from certain disabilities will be able to use the product. **Rationale:** It will allow the product to feel more accessible for use which would allow the product to become more successful. **Fit Criterion:** A few people of certain disabilities will be able to understand the product and use it to its full potential. **Priority:** 7 **Dependencies:**None

++Convenience Requirements++

Functional **ID Number:** #7 **Type:** Usability **Description:** The product will be convenient and available for users. **Rationale:** Making the product more convenient for users will

allow it to become more popular for choice of use. **Fit Criterion:** A person will test opening the product with smart devices. **Priority:** 10 **Dependencies:**None

++Speed and Latency requirements++

Functional **ID Number:** #8 **Type:** Performance **Description:** How fast the product will take to open and use. **Rationale:** Making the product fast in terms of usability will offer it as a favorable choice to use. **Fit Criterion:** The product will open and display information in less than 30 seconds. **Priority:** 8 **Dependencies:** #10. #11, #12

++Safety-Critical requirements++

Non-Functional **ID Number:** #9 **Type:** Performance **Description:** How will the product cause damages **Rationale:** The product will not cause any dangerous or harmful chemicals to people or the environment. **Fit Criterion:** The product shall not cause any damages or harmful effects to users. **Priority:** 10 **Dependencies:** None

++Precision or Accuracy Requirements++

Functional **ID Number:** #10 **Type:** Performance **Description:** The desired accuracy of the product. **Rationale:** This allows the data provided by the product to be reliable to users which would build confidence in the product. **Fit Criterion:** Accuracy of weather temperature will be within 2 degrees fahrenheit. **Priority:** 10 **Dependencies:** None

++Reliability and Availability Requirements++

Functional **ID Number:** #11 **Type:** Performance **Description:** The allowable time for failure and availability. **Rationale:** By having a long availability time to users the product will become more useful. **Fit Criterion:** The product will be available 24 hours a day and 365 days a year. **Priority:** 10 **Dependencies:**

++Longevity Requirements++

Functional **ID Number:** #12 **Type:** Performance **Description:** The expected lifetime of the product. **Rationale:** It is important for the product to have a long lifetime in order for it to have any kind of success. **Fit Criterion:** The product shall undergo maintenance every year. **Priority:** 3 **Dependencies:** None

++Expected Physical Environment++

Functional **ID Number:** #13 **Type:** Operational and Environmental **Description:** The physical environment in which the product will be used. **Rationale:** This will make the product more available and usable to the public. **Fit Criterion:** The product will be able to be used in all environments. **Priority:** 10 **Dependencies:** None

++Requirements for Interfacing with Adjacent Systems++

Functional **ID Number:** #14 **Type:** Operational and Environmental **Description:** The product will need to collect data from other websites. **Rationale:** This will allow the product to have an accurate reading for its desired data. **Fit Criterion:** The product will grab data from three separate weather sources in order to display the desired output. **Priority**: 10 **Dependencies:** The Websites used.

++Productization Requirements++

Functional **ID Number:** #15 **Type:** Operational and Environmental **Description:** The product will be free on the internet and will not require any subscription. **Rationale:** This

will allow users to be more willing to use the site. **Fit Criterion:** The product will be displayed within the internet on any search engine. **Priority:** 10 **Dependencies:** None

++Maintenance Requirements++

Functional **ID Number:** #16 **Type:** Maintainability and Support **Description:** If any maintenance is needed it will be done overnight. **Rationale:** By doing maintenance at night it would be more convenient for people who will want to use it the next day. **Fit Criterion:** If a weather station goes down then it will be replaced in the product overnight. **Priority:** 4 **Dependencies:** #17, #18

++Adaptability Requirements++

Functional **ID Number:** #17 **Type:** Maintainability and Support **Description:** It will be able to run on windows 7. **Rationale:** This will allow easy tests for new changes before they are pushed out. **Fit Criterion:** The product will operate in windows 7. **Priority:** 9 **Dependencies:** #18

++Access Requirements++

Functional **ID Number:** #18 **Type:** Security **Description:** Only the developer will be able to access the data and code stored in the product. **Rationale:** They are the creator of the product and by making them the only one to interfere with the product's code is the safest option. **Fit Criterion:** The person who will have access is Evan Hack because they are the programmer. **Priority:** 10 **Dependencies:** None

++Integrity Requirements++

Functional **ID Number:** #19 **Type:** Security **Description:** The product shall prevent incorrect data from being introduced. **Rationale:** Products that display incorrect data are often not trusted and therefore are not used. **Fit Criterion:** The product will be tested multiple times to see if it displays the correct calculated data. **Priority:** 10 **Dependencies:** #18 and #20

++Privacy Requirements++

Functional **ID Number:** #20 **Type:** Security **Description:** The product shall protect private information in accordance with the relevant privacy laws and the organization's information policy. **Rationale:** A product that does not protect its users information can cause users to not trust the product. **Fit Criterion:** The product will allow users the option to save their location settings. **Priority:** 10 **Dependencies:** None

++Contact Requirements++

Non-Functional **ID Number:** #21 **Type:** Security **Description:** This product will allow users to contact or connect to the designer when faced with any issues. **Rationale:** A product that allows connection between user and creator can create trust in the product. **Fit Criterion:** The product will allow users the option and information needed to contact the creator. **Priority:** 10 **Dependencies:** None