< Team Oreo >

<Dual Alarm AM/FM Clock Radio>
Formal Use Cases for a FM/AM Clock Radio

Version <0.1>

Revision History

Date	Version	Description	Author
January 26, 2017	0.1	First draft. To be refined primarily during elaboration.	Brielen Beamon, Gabrielle Cozart, Donovan Roseau

Formal Use Cases for a FM/AM Clock Radio

Use Case Name: Wake Me Up

Scope: Software for a FM/AM Clock Radio

Level: sub-functional

Primary Actor: Owner

Stakeholders and Interests:

Consumers:

Anyone who would want to purchase the product. They would want to wake up at the set time that the owner has pre-determined.

Manufactures:

They would desire for their product to function in a simplistic way. The alarm should sound off at the given time from the user.

Neighbor:

In the case that the owner accidentally sets the alarm to pm without realizing (make pm/am very clear) the neighbors could be annoyed by a non stop alarm while the owner is at work.

Preconditions: The alarm has been set by the owner.

Success Guarantee: The clock's alarm rings at the time specified by the owner.

Main Success Scenario:

1. Owner switches clock to alarm mode
2. Owner changes the hour until desired hour is reached
3. Owner changes the minutes until the desired minutes are reached

4. Ensure that the alarm is set to the desired time of day, AM or PM.
5. Owner presses the alarm button again to set and exit alarm mode.
6. Owner goes to sleep
7. At the specified time, the alarm rings.
8. The owner of the clock wakes up

Extensions: Alternate scenarios of success or failure.

1. The clock has a malfunction
2. The alarm function no longer operates correctly'
3. The owner does not wake up when he is supposed to

Special Requirements: Button to switch to alarm mode, button to change hour, button to change minutes

Technology and Data Variations List: Batteries to power clock

Frequency of Occurrence: Necessary to reset when power goes out or alarm clock is moved to a different source of power.

Open Issues: The clock does not take into account daylight savings times. Clock doesn't know if the owner is home; therefore, an alarm could keep ringing non-stop. When the power goes out, the time is not kept and will need to be reset.

Use Case Name: Set Time

Scope: Software for a FM/AM Clock Radio

Level: user-goal

Primary Actor: Owner

Stakeholders and Interests:

Owner:

Wants to be able to set the accurate time once and not have to reset it multiple times. The time should sync with all other clocks.

Manufacturer:

Wants the radio to be successful in order for a widely sold product.

Preconditions: FM/AM Clock Radio should be plugged in and turned on.

Success Guarantee: The time should be set successfully, am and pm should be taken account of.

Main Success Scenario:

1. Owner switches to set time mode to set the time of day.
2. Changes the hour time, minute time, and am/pm setting.
3. Successfully sets the time for the time of day.

Extensions: Alternate scenarios of success or failure.

1. Owner doesn't set the accurate am/pm time.
2. When alarm clock is set, it goes off at the wrong time of day.
3. Doesn't wake up the owner.

Special Requirements: Button for set time, button for set alarm.

Technology and Data Variations List: Batteries for backup power.

Frequency of Occurrence: Necessary to reset when power goes out or alarm clock is moved to a different source of power.

Open Issues: The clock does not take into account daylight savings times. Clock doesn't know if the owner is home; therefore, an alarm could keep ringing non-stop. When the power goes out, the time is not kept and will need to be reset.