

Team ültraLiteBeam

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Use Case Elaboration

Use Cases

Use Case Section	Comment
Use Case Name	Set an alarm
Scope	AM/FM alarm system
Level	User Goal
Primary Actor	Tired Tina
Stakeholders and Interests	<p>The owner of the alarm: Wants to be woken up at a specified time.</p> <p>The manufacturer of the alarm: Wants to produce a functional alarm component in a time and cost-effective manner</p>
Precondition	The alarm clock is powered. Has alarm set.
Success Guarantee	Clock didn't lose power, user has alarm set to correct time.
Main Success Scenario	The alarm will sound at the specified time.
Extensions	Power is lost, snooze button is activated
Special Requirements	Tired Tina is sleeping within audible range of the alarm clock
Technology and Data Variation List	<ul style="list-style-type: none"> • Military time vs standard time • Hour button, minute button • 1 click increments, hour/minute increased by one • On hold run through numbers at 5 per second. • Alarm toggle on/off • When setting alarm, User must choose between either; alarm noise, or a chosen radio frequency
Frequency of Occurrence	Repeat once daily unless user specifies otherwise.
Misc	Users must manually apply daylight savings time.

Use Case Section	Comment
Use Case Name	Listenin' to the radio
Scope	The AM/FM radio
Level	User Goal
Primary Actor	Tunin' Tina
Stakeholders and Interests	<p>The owner of the alarm: Expects consistent reception to listen to the radio</p> <p>The manufacturer of the alarm: Wants to produce a functional radio component in a time and cost-effective manner</p>
Precondition	Has electricity, has AM/FM radio stations broadcasting in range.
Success Guarantee	The User is tuned to a frequency which a station is currently broadcasting on.
Main Success Scenario	User gets to listen to the AM/FM Station they have tuned to.
Extensions	If there are no signals in range, the user will only hear static.
Special Requirements	User is in ear-range of the alarm clock, user can hear.
Technology and Data Variation List	<ul style="list-style-type: none"> ● Scanner button searches for nearest non-static station. ● Tune up / down button increment / decrement by a preset amount (determined by manf.) ● AM/FM toggle switch. ● Volume knob
Frequency of Occurrence	Could be continuous
Misc	What are the standards for AM/FM receivers?

Use Case Section	Comment
Use Case Name	Set the time
Scope	The Clock
Level	User Goal
Primary Actor	Timely Tina
Stakeholders and Interests	The user of the clock: assumes time to be accurate
Precondition	Clock has been manually adjusted to account for daylight savings time
Success Guarantee	The user has the clock set correctly and the clock is displaying the correct time
Main Success Scenario	User knows the time because they read the clock
Extensions	If the power goes out, the clock will be reset to 12:00AM
Special Requirements	User can see clock
Technology and Data Variation List	<ul style="list-style-type: none"> • Hour button increments hour by 1 <ul style="list-style-type: none"> ◦ If user increments when hour reaches 12, it will roll over to 1 • Minute button increments minute by 1 <ul style="list-style-type: none"> ◦ If user increments at :59, the minutes will rollover to :00 without incrementing hour • LED lights display time
Frequency of Occurrence	Could be continuous
Misc	No military time

Use Case Section	Comment
Use Case Name	Hit the Snooze
Scope	The Clock
Level	User Goal
Primary Actor	Tappen' Tina
Stakeholders and Interests	The user of the clock: assumes time to be accurate
Precondition	Clock has been manually adjusted to account for daylight savings time and the alarm has been set.
Success Guarantee	The user has the clock set correctly and the clock is displaying the correct time, if the alarm is sounding and the user hits the 'Snooze' button, the alarm will shut off for 9 minutes until the alarm will sound again.
Main Success Scenario	Tappen' Tina gets an extra 9 minutes of sleep.
Extensions	If the power goes out, the clock will be reset to 12:00AM
Special Requirements	User can reach the 'Snooze' button.
Technology and Data Variation List	<ul style="list-style-type: none"> ● Hour button increments hour by 1 <ul style="list-style-type: none"> ○ If user increments when hour reaches 12, it will roll over to 1 ● Minute button increments minute by 1 <ul style="list-style-type: none"> ○ If user increments at :59, the minutes will rollover to :00 without incrementing hour ●
Frequency of Occurrence	Possibly daily.
Misc	

Domain Model

Visual Paradigm Standard(College of Charleston)

