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| Outbreak Smartphone App for iPhone  Use Case: Vaccine Creation |

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Use Case: Vaccine Creation

# Vaccine Creation

## Brief Description

This use case allows the user to create a vaccine for viruses by playing the vaccine creation mini-game.

## Requirements trace

Offline somewhere

## Involved actors

iPhone User

## Preconditions

The system interface is at the “offline” screen

## Postconditions

Phone returns to the “offline” section

## Invariants

Combination formula for items

# FLOW EVENTS

## Basic flow

This use case starts when the user presses the play alchemy button in offline mode.

* + 1. User presses interface button on the iPhone to play the vaccine creator
    2. The iPhone connects to the web server
    3. The iPhone sends the device id to the web server
    4. The web server retrieves the player’s inventory from the database
    5. The user mixes and plays the Vaccine Creation mini-game and presses the brew button
    6. The game yields a vaccine created from the given recipe formula
    7. iPhone sends new inventory items to web server
    8. web server updates inventory in the database
    9. The user sees a confirmation of either a success or failure of the created virus

# Extension Points – None

# Scenarios

## Happy day

Assumptions: User – Sean

Steps:

* + 1. Sean Presses the interface button on the iPhone to play Vaccine Creator
    2. The iPhone connects to the web server
    3. The iPhone sends Sean’s phone id to the web server
    4. The web server retrieves Sean’s inventory from the database
    5. Sean mixes up what he thinks is the correct recipe for creating a vaccine for the virus he is looking into vaccinating against and presses brew
    6. The game yields Sean vaccine
    7. The iPhone sends the new inventory item to the web server
    8. The webserver updates Sean’s inventory on the database with the current one
    9. Sean sees a “successful Combination” screen with the vaccine created

## Rainy Day

Assumptions: User – Sean

Steps:

* + 1. Sean Presses the interface button on the iPhone to play vaccine creator
    2. The iPhone connects to the web server
    3. The connection cannot be established
    4. The app displays signal strength recommends relocation

## Alternatives