Portfolio Introduction

Virtual Disaster Day is the translation of an in-person live educational role-playing scenario to an online platform. The game is centered around triaging, diagnosing, treating, and dismissing these patient cases. Multiple disciplines attend Disaster Day and take on their unique roles. For this reason, the game was split into segments based on where those disciplines would be located in the game. The goal of this portion of Disaster Day is to recreate the experience of working in the pop-up field hospital. This location begins with secondary triage, where nursing students re-triage patients before they enter the field hospital proper.

This document captures the core gameplay for most players (distinguished from patients).

The Inventory Bot rules were created by my coworker, Rami Abu-Hamdan. All other elements were created by me and reviewed by our Design Lead, Marty Newcomb.

Contents

Overview

The game is played in the following manner:

1. A patient enters the game at Secondary Triage. They will simultaneously enter the Triage voice channel in Discord.
    a. The patient walks to a tarp or to the waiting area.
    b. If a patient is not seen in a timely manner, they might **go prone** in response to neglect. This patient will fall to the floor and is in dire need of help.
2. The patient is triaged by the team in Secondary Triage.
    a. Players ask the patient questions to determine their condition. No turn order or progress wheels apply here.
3. If the patient is admitted to the Field Hospital, a charge nurse assigns the patient to a ward and a bed.
    a. The charge nurse speaks with the patient in a voice channel (Charge Nurse X in the server).
    b. Then, the charge nurse assigns the patient to a **ward** and a **bed**. (e.g., Ward 1 Bed 3.)
4. The patient enters the ward and **turn order** begins.
    a. The patient walks through the portal in VRchat to enter the ward. They also join players in the appropriate Ward X voice channel in Discord.
    b. Players view an active livestream of a patient. They speak to the patient as if they were present.
    c. Players address issues with the patient by **announcing** an action.
        i. For instance, "I am going to apply a tourniquet to the patient."
        ii. **Waiting**, **Observing**, and **Monitoring** are viable actions.
    d. Once announced, the player should **describe their action**.
    e. The action is **automatically successful**. If there is an active progress wheel, the patient **fills in wheel segments** or **stops the wheel** in response to player actions at the **end** of the round. If there are no more actions to take, the round ends immediately.
        i. Some wheels are invisible to players. Not every condition is visible!
    f. Without interruption by the players, when all segment pieces have been filled, the wheel is considered completed and the consequence is applied.
    g. The patient remains until their case is resolved.
5. When a case is complete, the patient is discharged. They will leave VRchat and the Ward X voice channel they were in.

Turn Order and Rounds

The first round begins when the first patient enters the ward.

1. Patient arrives, signaling the first round.
2. Players begin in this **turn order** (as applicable):
    1. Nurse

2. Doctor
3. Pharmacist
4. Athletic Trainer
5. (Any additional nurses or trainers are placed either before the first nurse or after the first trainer.)
3. Keep in mind:
   1. **Turn order is applied to all patients at once.** There is no need to begin from the top with each patient.
   2. **Places within the turn order can be changed at will.** Players who want to swap their turn order simply declare they will be swapping their places when their turn arrives.
4. Each player **announces their action** for the turn.
5. The round ends when **at least one SP is spent** by any player action and **all turns have been taken.**
6. If there are **no patients in the ward, the turn order is dropped.** When a new patient arrives, enter turn order again.

Progress Wheels and Segment Points (SP)

Events within the Field Hospital are tracked with Progress Wheels. Each wheel is made of either 4, 6, 8, or 12 pieces. These pieces are called **segments**. **SP** refers to a **segment point.** A completed Progress Wheel results in a **consequence**. For instance, a patient may have the wheel presented in *figure 1.* Each action will progress the wheel by a certain number of segments. Players will see there is a wheel but may not know what consequence will come at the end of it. Once a wheel is interrupted, **it is interrupted forever**, meaning it cannot come back for any reason.

Actions can occur **immediately** or **at the end of the next turn.** Immediately means you will receive information in your turn, no matter how many SP are spent. End of the round means information is given when all players have performed actions and the round has ended. Example actions are at the end of this document. These tables are **not** an exhaustive list of every action in the game; rather, they act as a guide for determining new actions.

The Inventory Bot

Some actions require an **item**. Items are represented by **emojis** within Discord. There may be multiple items with the same icon. When you take an action that uses an item, use that item's emoji in the appropriate ward channel. This will allow the **inventory bot** to track what items were used.

To use Disaster Day emojis:

1. Type a colon, then begin typing the **emoji name** (see the emoji table below).
2. Type the proper name, then follow with another colon. For example, to use a BP Cuff (see in *Figure 1*), you would type, **:bloodPressureCuff:**

3. Press **enter** to send the message. The Inventory Bot will respond with the emoji name to signify that you have used an item.

Figure 1: A player uses a BP cuff.

Item	Emoji Name
Generic Item (Example)	genitem
1 mL syringes	syringe_1m
3 mL syringes	syringe_3m
5 mL syringes	syringe_5m
Insulin syringes	syringe_insulin
Toomey syringes	syringe_irrigation
IV start kits	iv_start
NS IV Flush Syringes	iv_flush
Nasal Cannula	nasal_can
Nasogastric Tubing	nasogastric
Large Gauze Pads	gauze_L
Gauze Pads 4X4	gauze_4
Gauze Pads 2X2	gauze_2
Kerlix Rolls	kerlix
Thermometer	thermometer
Thermometer probe covers	thermometer_cover
Alcohol pads	alcohol_pads
Baby wipes	baby_wipes
Clorox wipes	clorox_wipes
Transpore Medical Tape 1/2" width	tape_transpore
Silk Medical Tape 2" width	tape_silk
Non-Latex Gloves	gloves
Non-Rebreather Masks	mask
Manual BP Cuffs	bloodPressureCuff
Crutches	crutches
Wheel Chair	wheel_chair
Pulse Oximeter	pulse_ox
Allergy Band Orange	allergy_orange
Allergy Band Red	allergy_red
Tumescent Y Tubing	tumy
"Y tubing" Blood Tubing w/ filter	y_tube
IV tubing (free flow, no IV pumps)	iv_tubing

IV catheters - 18 gauge	iv_cath_18
IV catheters - 20 gauge	iv_cath_20
IV catheters - 23 gauge	iv_cath_23
IV catheters - 25 gauge	iv_cath_25
Foley kits	foley
Chest tube	chest_tube
Chest tube insertion kits	chest_insert
Chest tube chamber	chest_chamber
NS irrigation solution	irrigation_sol
Israeli Pressure Dressing	pressure_dressing
SAM Splints	splint
Restraints	restraint
Slings	sling
Tourniquets	tourniquet
Paper Towels	paper_towel
Blankets	blanket
Disposable diapers	diapers
C-Collar Adult	collar_adult
C-Collar Pediatric	collar_pediatric
Emergency Airway Kit	airway_kit
Patient ID wristbands	id_band
Triage tags	triage_tag
Ambu bags	ambu_bag
Glucometer	glucometer
Glucometer strips	gluco_strips
Hospital gowns	h_gown
Plastic bedpan	bedpan
Plastic kidney bowls	kidney_bowl
Hand Sanitizer	hand_sanitizer
ISTAT (portable lab)	istat
ISTAT strips	istat_strips
ISTAT reagents	istat_reagent
Dermabond	dermabond
Lactated Ringer IV Fluid Bags	iv_bag

Interprofessional Communication Points

1. When a player communicates fully and effectively, *any other player* can award an **IPC point**.
   a. When the point is awarded, the player awarding the point must **explain** why they are awarding the point. For example: "I'm awarding you an IPC point for checking back with Josey on the IV dosage."

b. **Faculty** can also award IPC points for good communication and, unique to their role, **remove points** if communication degrades. **Faculty can award an IPC piece to the team as well.**
2. **3 IPC points** (held by any player) convert into an IPC reward.
3. Any player can use the team's IPC reward to **reverse a negative event or bolster a positive event.**
4. If players accrue pieces and hold on to them, they may use those pieces on a different patient later in the game.
    a. This makes effective and clear communication a game-wide resource, not a short-term commodity.
    b. A player can have a **maximum of one IPC reward**. They cannot gain more IPC points until they have used existing pieces. This creates a maximum of **three IPC points.** However, teams have no limit other than the number of players.

Field Hospital IPC Points

- **Patients cannot award IPC points**. This encourages the team to pay attention to one another as well as the patient.
- **IPC points** (held by any player) convert into an IPC reward **when the player decides to spend them.**
- During the next round, **any player** can use the team's IPC piece to **walk back one progress wheel segment.**

Action Tables

General Actions

Action	SP	Enacted
Assist another player's action	Free	Immediately
Ask patient questions (up to 3)	Free	Immediately
Ask patient questions (3+)	1	Immediately
Counsel on Medication	1	Immediately
Disposition and Home Care Instruction	1	Immediately
Call for assistance/backup/help/doctor	Free	Immediately
Respond to call for assistance	1	End of Next Turn

Observe/Monitor patient	1	End of Next Turn
Declare active patient	Free	Immediately
Order prescription	1	Pharmacy's Turn

Assessment Actions

Action	SP	Enacted
Declare assessment of vitals	Free	Immediately
Apply pulse oximeter - measure SPo2 and heartrate	1	Immediately
Assess temperature	1	Immediately
Palpate pulse and count respirations - measure heartrate and respiratory rate (should be 60 seconds of counting)	1	Immediately
Apply blood pressure cuff - measure BP	1	Immediately
Assess pain level - # out of 10	Free	Immediately
Assess level of consciousness	Free	Immediately
Head-to-toe assessment (rotating patient, asking questions)	1	End of Next Turn
Focused assessment (of a specific organ or issue)	2	End of Next Turn

Specific Actions

Action	SP	Enacted
Apply tourniquet (bleeding control)	1	End of Next Turn
Apply IV	1	Immediately

Apply pressure (to dressing or wound)	Free	Immediately
Apply pressure wrap (bleeding control)	1	Immediately
Clean wound	1	End of Next Turn
Apply bandage	1	Immediately
Use shears	1	End of Next Turn
Assess the patient's airway	1	Immediately
Provide food	1	End of Next Turn
Apply ointment on wound	Free	Immediately
Needle decompression	2	End of Next Turn
Apply neck brace	1	End of Next Turn
Crutches instruction	1	End of Next Turn
Provide oxygen	1	Immediately
Draw serum (blood)	2	2 Turns
Apply splint	1	2 Turns
Administer vaccine (including sharp disposal)	1	End of Next Turn