

A Generic RPG System

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1 About

Game mastering is a hobby of mine, and as part of the RPG community, I would like to offer a RPG system for other RPG enthusiasts. This system that I am going to present I call *BU(Basic Universal)*. It is designed to be universal(i.e. it can be used in any setting you like, from fantasy to science fiction), and minimalistic(i.e. it is intended to make as few assumptions as possible, and contain only what's essential for any RPG). It does not has

and the like. The attributes will be quantified by positive and negative integers, where a 0 means the character is average with respect to that attribute, a positive integer means he's better than average, and a negative one means he's below average. Though no attribute is mandatory, it is highly recommended that there be an attribute like Dexterity or Speed, to quantify how fast the character is, and another called Strength.

Status Section This section is made to include the parameters that change often, and that we are going to track constantly. This section should include the character's HP, money, fatigue points(to see how tired he is), hunger, mana(if he is a mage), encumbrance, and so on; it may also include the current weapon and armor he's using. With the exception of HP, everything else is optional. In BU *every character* has a maximum HP of 10, which represents perfect health status. due to the damages he takes his HP might be reduced, and if it reaches or goes below 0, he may fall unconscious or die.

Temporary Conditions Section This section is optional, and in fact most games will not need it. It is a blank space where the GM will write current buffs, debuffs, ailments, or other conditions affecting the character(e.g. *hasten, float, poisoned, frozen, paralysed, asleep*). This section is different from the previous one, because the latter keeps track of parameters(i.e. at any moment whatsoever the character has a definite quantity of HP, money, mana, and is using a specific weapon. Those are parameters the character carries with him all the time, even if they vary from one moment to another). While the present section is made to register special and temporary conditions affecting the character.

Inventory Section This section should be omitted, if the setting is one where the characters don't carry many items with them, or if keeping track of the items they carry is unimportant. It is a space in blank where the GM writes the items that the character is currently carrying.

Expertises Section This one includes the expertises the character learned throughout the course of his life, and that might be useful in solving problems and challenges during the campaign(e.g. Animal Training, Driving, Athletics, Hacking, Firearms). If present, this section should include not only the expertises, but besides each of them there should be a positive number indication how good the character is with it. Notice that I am calling here *expertise* what most other systems call *skill*.

Skills Section This one should be subdivided into two subsections: the *combat skills*, and the *utility skills*. And once again, the *combat skills* subsection should be further divided into three sections: *attack skills*, and *reaction skills*. Those are blank spaces which the GM will fill with the skills the character possess. More about skills will be said later on.

Advantages and Disadvantages I prefer to omit this one, but some GMs might find this section useful. This is a blank space the GM will feel with traits that help the character - advantages(e.g. good contacts, doesn't need oxygen, invisibility), or traits that don't contribute with him - disadvantage(e.g. schizophrenia, needs lots of sleep, stringent moral values).

Regardless of how the character sheet is made, it should include at least the first three section plus the Skills Section, and be very organized and legible.

3 Resolution System

Now we describe the basic mechanics for deciding how the events unfold throughout the session.

3.1 Circumstance Roll

Work as follows: the GM defines a finite set of circumstances, and set for each of them a probability of occurring. He(or a player), throws percentile dice to generate a number from 1 to 100, and then decide what will happen

Example A PC is trying to jump a very high wall. The GM decides that there is a 60% chance of him failing to jump and colliding with the wall, a 30% chance of him succeeding in the jump but fail to land properly, and a 10% chance of him succeeding to jump and land properly. The GM says the following: "Throw percentiles, if you get a number from 1 to 60 you fail to jump, from 61 to 90 you succeed to jump but fail to land properly, from 91 to 100 you succeed in both jumping and landing". The player throws the dice and get a 76, he succeeds to jump but fail to land.

3.2 Action Roll

When a character, PC or NPC, tries to do something in which he can significantly fail or succeed(e.g. repair a car, hitting a target with a pistol, persuading an enemy in surrendering), he may do an Action Roll. To be

sure, if the GM wants to, he will do a Circumstance Roll, as was done in the example above(And what doesn't happen if the GM wants to?).

Those rolls work as follows: the GM(or a player) rolls 5d20(five 20-sided dice) against a *difficult* which ranges from 2 up to 20. Any number equal to or higher than the difficulty is considered a success. The player succeeds if he has *at least* 3 successes.

Before the session the GM may set predetermined difficulties for some actions, and any PC trying one of those actions will roll against that predetermined difficulty.

Example The GM has set beforehand that the difficulty for lifting a certain, very large stone, is equal to $12 - 2*PC's\ Strength$. Blake, a PC with Strength +2 is trying to lift that stone. The player rolls against the difficulty of $12 - 2*2 = 8$, and get the following number: (7, 12, 11, 17, 10). He has a total of 4 success, and succeeds in lifting the stone.

In addition to that, any roll with no successes is considered a *dramatic failure*, and any roll with 5 successes is considered a *exceptional success*. In a dramatic failure, in addition to failing in executing the action, something very bad happens, whereas in a exceptional success, in addition to succeeding in executing the action, something very good happens. The GM decides according to the circumstances. For example, in a case where a PC is trying to hit someone with a gun. A dramatic failure might mean that he hits the wrong target whereas an exceptional success might mean that the shot not only hit the target, but that it hit in full one of his vital organs.

However, this dramatic failure/exceptional success rule isn't meant to be followed strictly. There is no need to worry about it if there is no meaningful sense in which a success at a certain action can be exceptional. And also, it's necessary to recognize that some cases are more likely to have dramatic failure than others. For example, a PC is throwing a grenade; in this case, it's necessary to recognize that a dramatic failure(e.g. hitting the wrong target, or failling to throw the grenade and let it explode where he is) is much more likely to happen than it would be if he were shotting with a gun. The GM might reflect this by considering rolls with *less than 2* successes as dramatic failure.

The table below tells us, given a specified difficulty, the probability of succeeding in an Action Roll(i.e. the probability of rolling 5d20 and getting at least 3 successes). Ideally, the GM should consult this table before setting up the difficulties, so that he has some idea about how likely are the PCs to succeed at it.

Difficulty	Chance of succeeding
2	99.9%
3	99.1%
4	97.3%
5	94.2%
6	89.6%
7	83.7%
8	76.5%
9	68.3%
10	59.3%
11	50.0%
12	40.7%
13	31.7%
14	23.5%
15	16.3%
16	10.4%
17	5.8%
18	2.7%
19	0.9%
20	0.1%

3.3 Damage Roll

When a character is about to take damage, someone does a Damage Roll to decide how much damage he gets. Those rolls are done by rolling eight-sided dice(d8), how many will have to be determined case by case - the more dice are rolled, the greater the damage is expected to be. It work as follows: the GM(or player) throws the dice and counts how many of them show a number *greater than 2*, we say that the result of counting is the *accumulatted damage* up to that moment. In addition to that he rerolls any dice showing a number of 7 or 8, and if after rerolling that dice shows a number greater than 2, the accumulated damage should be incremented by adding +1. The process is repeated and dice showing a 7 or 8 are rerolled until they show a number smaller than 7, incrementing the accumulated damage along the way. When all the d8 on the table show a number smaller than 7, the process ends and the accumulated damage is the damage the character takes.

Example A PC is about to take damage, and the GM decides he is going to roll 4d8. He rolls and gets (2, 5, 7, 7); up to this moment he has accumulated 3 damage. Now he rerolls one of the dice showing 7 and gets a 1,

the accumulated damage isn't updated and the table looks like this (2, 5, 1, 7). Now he rerolls the other die and gets an 8; the accumulated damage is updated to 4 and he gets to reroll this die once more. He rerolls and gets a 5; the accumulated damage is updated to 5, but he doesn't get to reroll this die anymore. The table now looks like this: (2, 5, 1, 5).

Now let's make a few notices about this type of roll. First, Damage Rolls made with n dice result, on average, on a total of n points of damage. That is, if you are doing a Damage Roll with 4 dice, you are expected on average to take 4 points of damage. Second, let us call the values which don't increment the accumulated damage the *no increment range*, and the values which are rerolled the *reroll range*. The *no increment range* consists of the numbers 1 and 2, and the *reroll range* consists of the numbers 7 and 8. If we remove 2 from the *no increment range* and 7 from the *reroll range*, so that we now consider every number, with the exception of 1 to contribute to increase the accumulated damage, and only 8s are rerolled; we are still expected, on average, to take n points of damage when doing a Damage Roll with n dice. But now the damages are be more clustered around the average, there are less extremal values, and we are "more certain" about how much damage will be taken. Reciprocally, If we change the *no increment range* so as to include 1, 2, and 3, and the *reroll range* so as to include 6, 7, and 8, the average damage on Damage Rolls will still be the same, but the damages taken will be more scattered, there will be many damages extremely low, and many damages extremely large; and we will be "less certain" about how much damage will be taken.

Let us say that during the course of the session there happens a violent explosion when all the PCs are inside a certain castle. Some of the PCs are going to get very damage(e.g. he might have been near the source of the explosion, or the explosion might have hurled a piano right into his head), and some of the PCs are going to be only slightly damaged, or even not damaged at all(e.g. he might have been very far from the source of the explosion, the room he was in was not affected, or there was a wall protecting him from the explosion, while at the same time the roof around him didn't fall and no object collided with him). To reflect the chaotic and uneven manner in which the PCs are damaged by the explosion, the GM might use the remark from the last paragraph and enlarge the *no increment range* by including 3, and the *reroll range* by including 6.

Arguably, UMS's Damage Roll is more complicated than it's equivalent in other systems. But it has some advantages. First, everyone knows in the most straightforward way possible how much damage to expect from each roll. And second, unlike it's counterparts in other systems, it's possible to adjust the variance from which the damages are scattered away from the

average.

3.4 Contested Roll

When two or more characters are competing for something, be it a duel between two knights, a car race, or a competition between a few sellers to see who gets the customer to buy his product, we say that there is a *contest* going on. In UMS contests are resolved the simplest way possible: each participant rolls a d12, and adds(or subtract) to that number any relevant modifier. Then, the participants compare the numbers, and the one with the highest number is the winner. If there's a tie the GM is free to decide if the contest ended in a tie(if it makes sense), or if he will make those participants who tied to roll again so as to break the tie.

Example Two characters are engaging in an armwrestling. The first has Strength +1, and the second Strength +2. The GM tells they will do a Contested Roll, and add the double of their Strength as a modifier. They both roll d12, the first get 7, and the second gets 11. After adding the double of their respective Strengths to the values they rolled the first ends up with 9, and the second with 15. They compare the numbers and decide that the second character is the winner.

The table below shows, for a contest between 2 participants, the probability each participant has of winning and the probability of a tie occurring, provided one knows the modifiers the participants will get. Let us note that, as far as the probabilities are concerned, all that matters is the difference between the modifiers of the participants(i.e. if participant 1 has a modifier +3 and participant 2 has a modifier +1, then the probability each one has of winning and the probability of having a tie are the same as they would be, say, if participant 1 had a modifier of +2 and participant 2 a modifier of 0). The table below is made from the perspective of the participant high the highest modifier. First you check his advantage over the other participant in the first column, and check his probability of winning tying or losing in the second row. If the GM isn't allowing ties, and makes the participants reroll if a tie occurs, then the third column should be consulted instead.

Advantage	Outcome(with ties)	Outcome(without ties)
0	win: 45.8% tie: 8.3% lose: 45.8%	win: 50.0% lose: 50.0%
+1	win: 54.2% tie: 7.6% lose: 38.2%	win: 58.6% lose: 41.4%
+2	win: 61.8% tie: 6.9% lose: 31.3%	win: 66.4% lose: 33.6%
+3	win: 68.8% tie: 6.2% lose: 25.0%	win: 73.3% lose: 26.7%
+4	win: 75.0% tie: 5.6% lose: 19.4%	win: 79.4% lose: 20.6%
+5	win: 80.6% tie: 4.9% lose: 14.6%	win: 84.7% lose: 15.3%
+6	win: 85.4% tie: 4.2% lose: 10.4%	win: 89.1% lose: 10.9%
+7	win: 89.6% tie: 3.5% lose: 6.9%	win: 92.8% lose: 7.2%
+8	win: 93.1% tie: 2.8% lose: 4.2%	win: 95.7% lose: 4.3%
+9	win: 95.8% tie: 2.1% lose: 2.1%	win: 97.9% lose: 2.1%
+10	win: 97.9% tie: 1.4% lose: 0.7%	win: 99.3% lose: 0.7%
+11	win: 99.3% tie: 0.7% lose: 0.0%	win: 100.0% lose: 0.0%
+12	win: 100.0% tie: 0.0% lose: 0.0%	win: 100.0% lose: 0.0%

3.5 Too many dice?

BU uses a total of 5 different types of dice. This has the advantage of highlighting the difference between the roll types, and making it easier to remember each type of roll, by associate each of them with a different type of dice. But it also has an inconvenience, someone might not have all the necessary dice. But in such a case it's possible to adapt the rolls described in the previous section with other types of dice, with no significant loss.

4 Skills

The skills are subdivided into 2 major groups: *combat skills*, and *utility skills*. And the combat skills are themselves further divided into *attack skills*, and *reaction skills*. Every skill needs 3 elements to describe it: it's *name*, it's *difficulty*, and it's *description*. In addition, if it's a attack skill, it will need another element, it's *damage*.

Below is an Example of a skill of each of the 3 types:

Name: Water Hurl(attack skill)

Damage: Caster's Intelligence - Target's Defense

Difficulty: 13 - Intelligence(add -2 if it's full moon, and +2 if it's new moon)

Description: The mage controls the water with his mind and makes it move toward his enemy at a very high speed. Can only be used on water with a reasonable amount of purity and the caster needs to have both of his hand free. This skill is highly affected by the phases of the moon.

Name: Dodge(reaction skill)

Difficulty: 9 + Attacker's Dexterity

Description: If an opponent tries to hit you, you may try to dodge. If successful you avoid the attack and takes no damage.

Name: Digging(utility skill)

Difficulty: 12 - Digging Expertise

Description: You dig a vertical hole, whose length is proportional to your Strength. The difficulty can be increased if the soil isn't very favourable.

Attack skills are meant to be used as combat maneuvers with the purpose of hitting and damaging the opponent in combat. Reaction skills are meant to be used during combat, as a reaction to maneuvers of others. And utility skills are meant to be used both inside and outside of combat, though some

of them might take so long to execute that they might not be feasible for combat.

5 Combat

Most systems feature turn based cyclic combats. It is called cyclic because of the following: at the start of combat a certain order is established, and the characters take their turns cycling exactly in that order until combat ends. But it is possible to make a non-cyclic combat system as well, and it might have it's advantages. I am going to describe a non-cyclic combat system, because the cyclic variant is simpler, and the reader having some familiarity with RPG can straightforwardly adapt the non-cyclic system I'm about to present into a cyclic one.

At the start of each turn, everyone participating in the combat takes part in a *Initiative Contest*, and does a Contested Roll. The GM decides how the modifiers will be given to each participant. One solution is to use an attribute like Dexterity, or Speed(i.e. the GM may decide that the participants are going to add that attribute as modifier). The winner of the Contested Roll gets to act on that turn, and the others can do nothing, except possibly react to an action of the winner.

The winner announces a *combat maneuver*, and if necessary, makes an Action Roll to see if he succeeds in executing the maneuver. After the maneuver is announced and the relevant Action Roll(if any) is over, the other participants may, if possible, *react* to that combat maneuver. Once the combat maneuver and it's reactions have all been resolved, the turn is over, and the cycle repeats. This is in some sense more natural than cyclic combat systems, because intuitively characters with higher Speeds should get to do more maneuvers.

5.1 Combat Maneuvers

There is a total of 5 combat maneuvers:*move, use an attack skill, use an utility skill, change posture/ready weapon, wait*. Which may be executed simultaneously with *free actions*.

Move. The character moves a unit of length, determined by the GM. This unit of length should be the same for all characters, regardless of how fast he is(if he is faster he will win more Initiative Contests, and get to move more). The character may try to move and use an attack or utility skill at the same time, but the GM should put a penalty, because he is trying to do

two things at the same time, and trying to do two things at the same time is more difficulty than doing only one. He may also try changing his posture or readying a weapon while moving, but once more, the penalty should be appropriate.

Use an attack skill. Self-explanatory. But notice that succeeding the the Action Roll here doesn't mean you succeed in hitting the enemy. It means, say, if you are an archer, that you managed to shot the arrow and it's going in the direction of your opponent. And, if you are a fighter, that your fist is going into the direction of your opponent. In those cases you hit the opponent, though a reaction(e.g. the opponent dodges, block or parry) may save the opponent from being hit.

Use an utility skill. Self-explanatory. But, just like the attack skills, succeeding in the Action Roll merely means that you are in the process of executing and completing the action successfully, unless..., there's an interruption of some sort.

Change Posture/Ready weapon. It takes a little time to change your posture(e.g. standing, sitting, crouching), or to ready your weapon(e.g. taking your sword out of it's scabbard, loading your gun). And that should be reflected by taking a turn to do those kinds of actions. Things like assuming a defensive, or aggressive stance also count in this type of maneuver. Generally, this one is intended to included maneuvers in which the character repositions his body, and/or objects he is carrying, without moving out of the place he is in in an attempt to occupy another place.

Wait. This is what the character chooses if he doesn't execute any of the other combat maneuvers. He may either do nothing, or he might focus his attention on one or more enemies, readying a reaction to a movement they make(e.g. "I am paying attention to those two knights, and as soon as they do something I move to the left"). Doing the latter sets up a reaction; if the enemy(s) the PC is focusing on does a combat maneuver, there is the possibility that maneuver will trigger in the PC a reaction.

Free-actions. Actions like talking, or dropping an item, shouldn't take a full turn to execute, and can even be done simultaneous with the other combat maneuvers. In principle the character may do as many free-actions as he pleases, and there's no penalty. Though in some contexts there might occur exceptions. For example, a warrior doing an attack with a two-hands

swords can't do the free-action of picking up an item with his hands. Or if a mage is casting a spell which requires an extreme level of concentration, he may not be allowed to talk, or allowed on under a penalty.

5.2 Reactions

After the combat maneuver is announced, and the Action Roll(if any) done, the players say if they are going to use a reaction skill(the GM pausing to ask the players if they want to use a reaction skill would slow the game). if they don't stop and say any word it's considered that they aren't going to use any reaction skill at all. All the combat reactions are due either to a character who has set up a reaction in a previous turn due to a wait maneuver, or a character who decided to use a reaction skills. Those are the only source of combat reactions.

In the very improbable case where more than one participant is reacting to the combat maneuver, the order in which the reactions are resolved is important and the context by itself doesn't determine the order, those participants may need to do a Contested Roll to decide the order in which the reactions are resolved. There's no iteration; it's not possible to react to a reaction to a combat maneuver.

The system may sound too complicated, and to slow combat a lot, but it doesn't really need to be so. It seems more complicated because BU tries to give lots of flexibility, but in fact it's very likely that most of the time the only reaction skills the characters will have will be the dodge skill, or at most a parry skill. In those cases the GM will simply assume by default the PC being attacked is going to use the dodge skill and ask him right away to do the Action Roll.

5.3 When HP reaches 0

As was mentioned in 2.1, it's mandatory that every character has an HP, which has a maximum of 10, which is the HP any undamaged character in good health condition has. When the HP reaches or goes 0, he may either fall uncounsciouss or die, depending on the gravity of his wounds and how far below 0 his HP is. The GM decides how likely a character is of dying after reaching 0 HP, depending on the lethality he wants his combat to have.

It may sound strange to give to every character a HP of 10. But it has advantages. First, the number of dice involved in Damage Rolls will not increase, as campaign progresses and the characters get stronger. Second, the damage values get intuitive meaning: for example, a damage of 10 is a damage capable of making a foe in perfect health condition so damaged that

he is unable to do a thing, if he doesn't die. The damage correlates to the extent to which the target was damaged.

5.4 Ubiquitous Skills

BU has no mandatory skills, it leaves the GM to elaborate the skills he wants his game to have. It is very likely he will make everyone have a Brawl attack skill, that is, an attack skill where the character gives a punch or a kick. He may also make everyone have Dodge as reaction skill, and all the archers have aim as utility skill. The reason BU doesn't specify any skills as mandatory is to give maximum flexibility, but there wouldn't be much loss anyway if skills like those were mandatory. They are so ubiquitous in RPG games as to be almost universal. They might be unexisting, say, in a bizarre setting where all the characters walk in wheelchair and fight with psychical abilities.