

Mobile Application Design 2019 project

DnD Combat Assistant – User Interface

team: Jiří Matějka, xmatej52
Matěj Mlejnek, xmlejn04
Tomáš Opichal, xopich00

How to use the app?

The application usage is divided into two main tasks – first one is **defining** NPCs as templates and second one is **combat assistance**.

Defining NPCs

When you swipe from the left edge of your device, the sidebar appears. The list of options in the “*Templates*” section allows you to define not only NPCs with their attributes (stats) but also weapons, shields and armours which can be assigned to NPC.

The interfaces for defining weapons/shields/armours are all similar, so I will stick to describe for example **weapons definition**. In the Weapons view you can see a list of weapons you have already defined. **Important note:** We are talking here about creating templates, not instances of weapons, armours, shields and NPCs. This will be explained later.

To create a new weapon, click the add button in the bottom-right corner of the screen. Now you can define a new weapon template and set all its attributes to desired values. Every weapon (armour, shield) must have a unique name. When you are done with setting attributes, click Confirm.

To delete a weapon, press the weapon in the list and confirm the subsequent dialog. To update a weapon, just tap it and the same dialog like for creating will appear.

Now as we have learned how to define weapons, armours and shields, we can move on to define **NPC templates**. The only difference to weapons definition is that the Create (Update) dialog of NPC contains possible weapons/armours/shields lists. These lists contain possible items with which the NPCs are generated when the NPC template is used. You can edit the list by adding new possible item – just click on the add button next to the “Possible” text.

When you add new possible item, you should **give it a chance of generation** – items with higher chance are generated more often for the NPC. You can also remove the possible item by clicking the X button next to it.

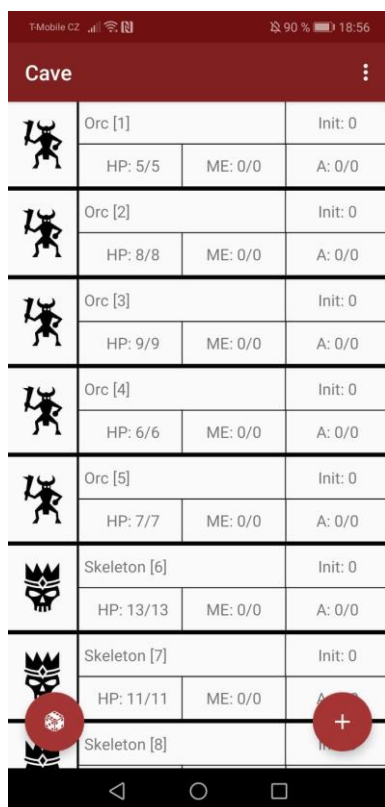
Now you should be able to define NPCs.

Combat assistance

In the sidebar you can find button for creating rooms and the rooms itself. Room is created only by giving it a name – nothing to explain here. Combat then takes place in a single room.

In the Room view you can add desired number of NPCs which you have defined in the previous step – now you are creating **the actual instances of NPCs**. When you press an NPC, its stats appear in the dialog and you can choose its weapon, armour and shield if you are not satisfied with the random generated items.

In the bottom-left corner, there is a button called Roll initiative, which should be used every round to determine order and number of NPCs actions.



The screenshot shows a mobile app interface for a 'Cave' room. At the top, there's a red header with the title 'Cave' and a menu icon. Below the header is a table listing NPCs. Each row has an icon, a name, and three columns for HP, ME (Melee), and A (Attack). The NPCs are Orc [1] through Orc [5], and Skeleton [6] through Skeleton [8]. At the bottom, there are two red circular buttons: one with a dice icon and one with a plus sign.

Icon	Name	HP	ME	A
Orc	Orc [1]	5/5	0/0	0/0
Orc	Orc [2]	8/8	0/0	0/0
Orc	Orc [3]	9/9	0/0	0/0
Orc	Orc [4]	6/6	0/0	0/0
Orc	Orc [5]	7/7	0/0	0/0
Skeleton	Skeleton [6]	13/13	0/0	0/0
Skeleton	Skeleton [7]	11/11	0/0	0/0
Skeleton	Skeleton [8]			



This screenshot is identical to the previous one, but with a context menu open over the 'Orc [2]' entry. The menu contains five options: 'Dodge', 'Defend melee', 'Melee attack', 'Take damage', and 'Delete', each with a corresponding icon.

Icon	Name	HP	ME	A
Orc	Orc [1]	5/5	0/0	0/0
Orc	Orc [2]	8/8	0/0	0/0
Orc	Orc [3]	9/9	0/0	0/0
Orc	Orc [4]	6/6	0/0	0/0
Orc	Orc [5]	7/7	0/0	0/0
Skeleton	Skeleton [6]	13/13	0/0	0/0
Skeleton	Skeleton [7]	11/11	0/0	0/0
Skeleton	Skeleton [8]			

- Dodge
- Defend melee
- Melee attack
- Take damage
- Delete

The combat itself consists of doing specific actions (specified by real players) with NPCs. When you tap an NPC, you can choose the action and in the subsequent dialog specify the action parameters. For example, you want the NPC to defend against melee attack, so you specify the opponent's Attack and Melee damage bonus and whether the NPC should use its weapon. The app itself then generates amount of damage to the NPC and decrement number of actions in the round.