

# TMG: TILT MOTION GAME

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## DESCRIPTION

TMG is a 2D platform style game for android. The user plays as a robot named Robo (temporarily) that is not bi-pedal, as most robots are portrayed, but instead moves with and is fixed between two large rugged tires. Robo remains motionless unless there is an incline so the player must tilt their device creating an incline causing Robo's tires to roll down the incline. Depending on further design decisions, Robo may have attached guns to shoot or the robot use attached shocks/springs to jump. As with most platform games, the goal is to reach the end of the level while achieving side goals usually involving points. The target audiences are children if there is only jumping and teenagers and adults if there is shooting.

## CORE FEATURES

- Physics: the game will feature a mechanics system where forces like gravity, friction, potential energy (in springs and bouncy objects) are computed for two dimensions—horizontal and vertical.
- The movement of the character is controlled by tilting the device either clockwise or counter-clockwise.
- The character will be a robot on tires. (In the story-boards, below, Robo is simply be portrayed as a tire.)
- Animated characters and objects.

## ADDITIONAL FEATURES

Many things about the game are not yet determined including the story and character design although I'm having fun drawing them out. The look will largely be decided while working. I have a vision for how I want it to look and I present that in the storyboards but besides the core features mentioned above, nothing else is final. The following are secondary goals:

- Multiple stages with different looks and a stage menu screen where the user picks which stage to play in.
- Shooting/Jumping. I will have to decide between these.
- Make Robo a humanoid robot (though still on tires) with hands and animated movements.
- Simple enemies to evade or fight.

## USE CASES

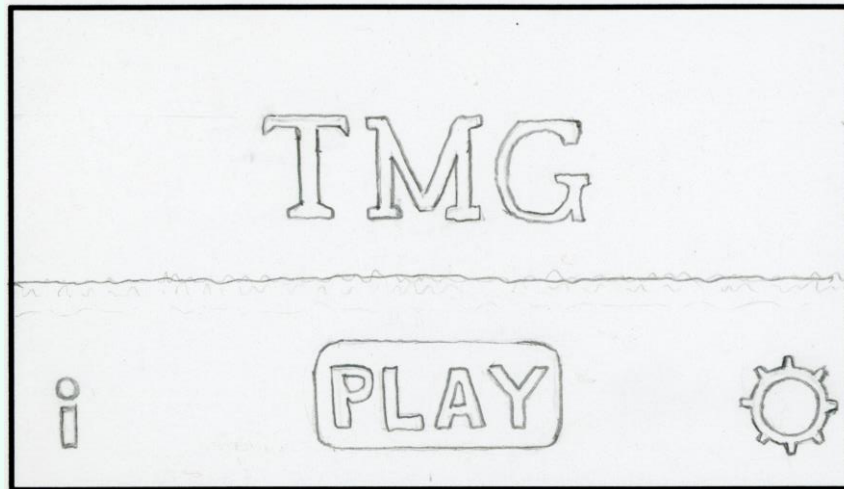
Stacy, who likes to play simple intuitive mobile games on her public transportation commute, downloads TMG looking for a fresh experience. She opens the app and is presented with a main menu with three image-buttons: Play, Information, and Settings. She clicks the familiar "i" symbol (for information) and is presented, in the same activity still, with three options: "Stats", "About" and "Controls". From each button she can get to more information about the game including the version number, the developer information and more useful information like the controls and achievements. Then, she clicks the familiar gear icon (for settings). Here she is presented with a few image buttons where each button displays the current setting. Stacy sees the music symbol; when this is pressed, the image displays a cross over the music which sets music to off. Another button is the speaker image, by default it's on but touching it sets all game sounds off and the image displays a cross over the speaker icon. The final button is the tilt control setting; by default, it shows a tilting mobile device and clicking it will show a finger meaning control has changed to the touch. Stacy turns sound off so she can listen to other music or podcast while playing and she touches the tilt-control button changing it to touch control so she get attention waving her phone around in public. She closes the app knowing her changes have been applied for when she plays it later.

Charlie likes playing classic-style platform games and has downloaded TMG for some simple fun. Wanting to just play, Charlie immediately sees the play button and chooses it. The game starts by giving a short story introduction/cinematic and then the player is given control of the character in the first stage. The first stage is more of a tutorial stage and so it's easy and it's used to just learn the controls. Charlie is shown the controls and is given the opportunity to use them for practice and to progress through the level. He is shown the small pause button that remains transparent on the top left and he takes notices and keeps playing. He is also shown check point symbol which indicates when the game progress has been saved. Charlie gets to the end of the stage and is brought to a map of the levels where the previously played levels can be re-played, the un-played levels are shown as shadows and the next one can be attempted. He moves on and plays the second stage. While playing, he decides to press the home button to check the score on a basketball game he is following. He then presses the current tasks button and chooses TMG and is brought back to the game which is now paused and must press the resume button to continue playing. Charlie plays the second and third levels consecutively and then is challenged a little in the middle of the fourth stage so he exits the game knowing he will retry later at the last checkpoint.

## STORYBOARDS

### MAIN MENU

I'm planning to not use the notification bar throughout the application. It should definitely be ignored while in the actual game because that is too distracting. Originally, I wanted to use it for the menu only but that will be inconsistent and confusing.



**Figure 1 main menu. This is the first interactive screen.**

The main menu features three buttons: information, play, and settings. Only play will take user to another screen. The other two options, information and settings, will display their options in the same screen. In terms of design, the title won't be "TMG" and the background could be something pretty or more artistic.

## MAIN MENU: INFORMATION AND SETTINGS

When either information or settings are touched by the user, more options will appear above. Clicking anything in Information takes user to another screen/activity but settings allow users to make changes directly in the same screen.

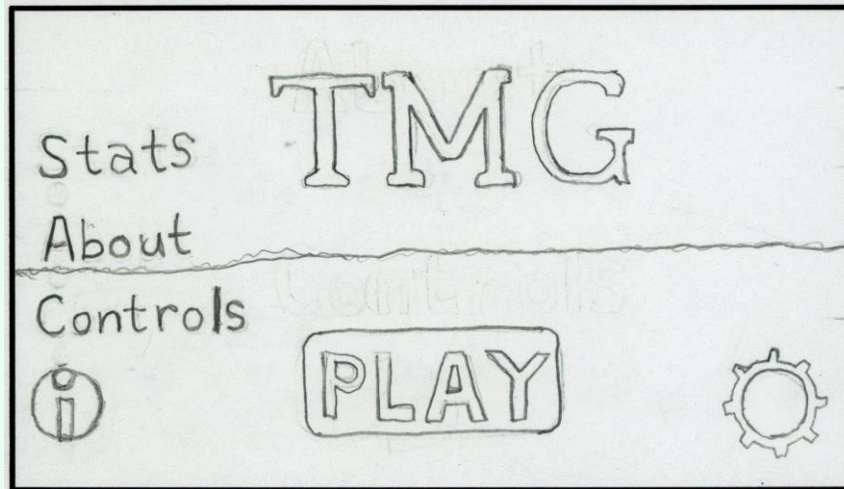


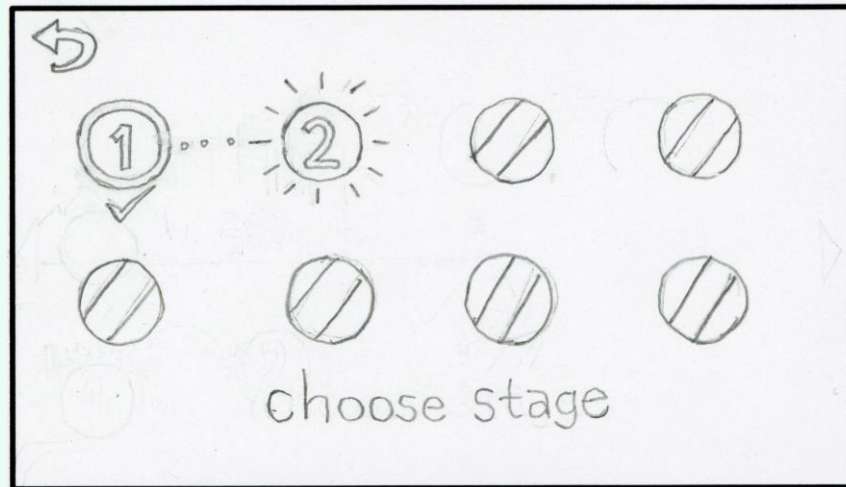
Figure 2 main menu with information selected. Choosing any item opens another activity



Figure 3 main menu with settings selected. Changes are made in the same screen. E.g. music can be disabled by touching the music icon changing it to a music icon with a slash over it.

## LEVEL SELECTION

When the user first touches Play, the first stage will immediately begin because the user has not completed any other stage but once the first stage has been completed, the user can choose to play from the 1<sup>st</sup>, 2<sup>nd</sup> stage and more as they are unlocked.

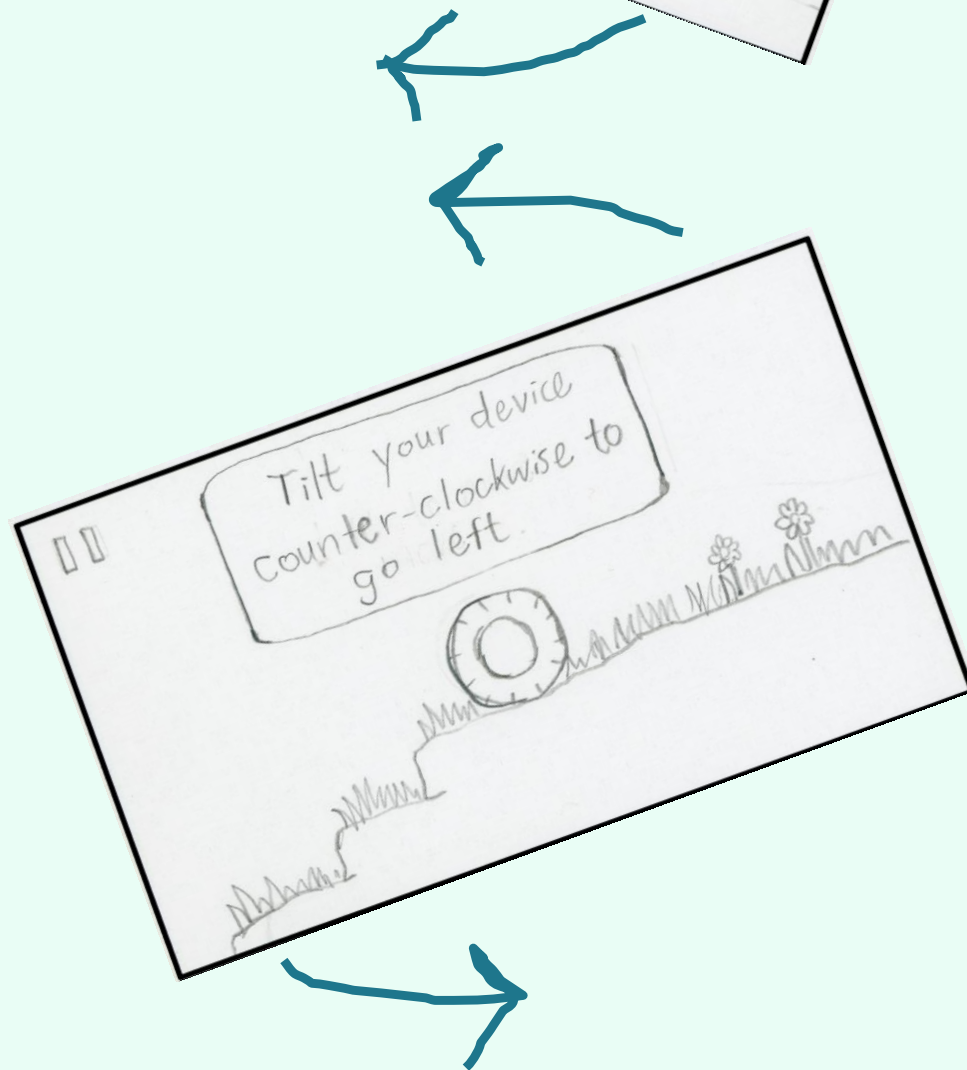
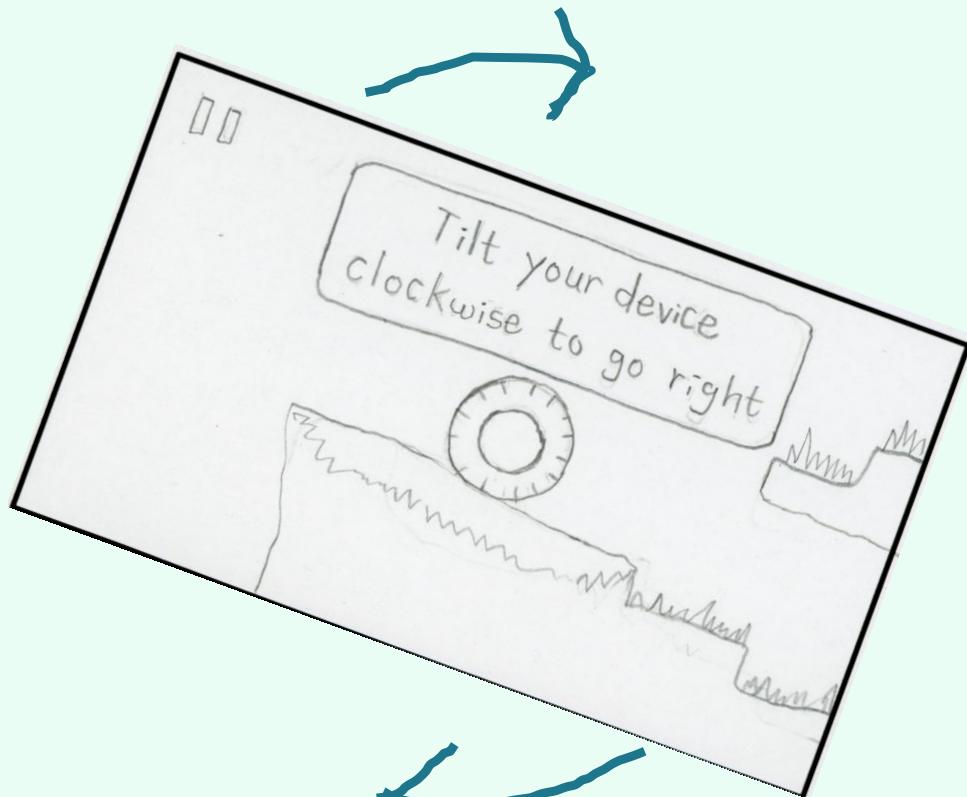


**Figure 4 the level selection screen. The user sees this after choosing play but only if 1<sup>st</sup> stage has been completed. Otherwise, first stage begins automatically.**

## GAMEPLAY

The first stage will be training and the user will be shown how to play through the text boxes. I'm currently representing the main character, Robo, as a tire because the character design is not decided yet and is something that will be settled later. I have made many sketches of how Robo will look like but I want to keep it basic for now.

On the following pages, there are screens showing the tutorial stage.



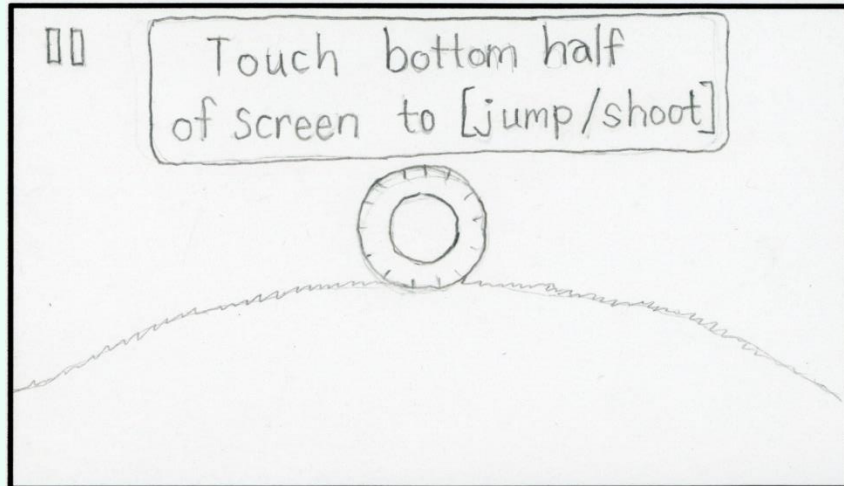


Figure 5 The gameplay will either feature shooting or jumping, not both.

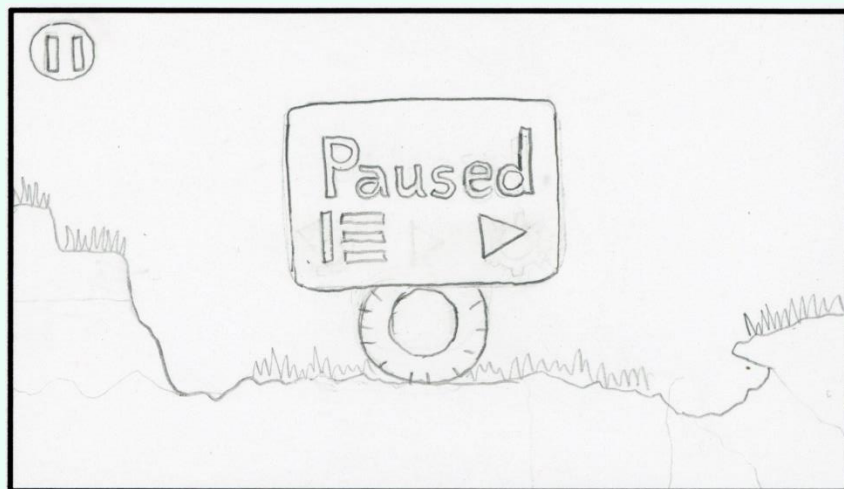


Figure 6 Pause button has been pressed. User can either go back to main menu or resume.

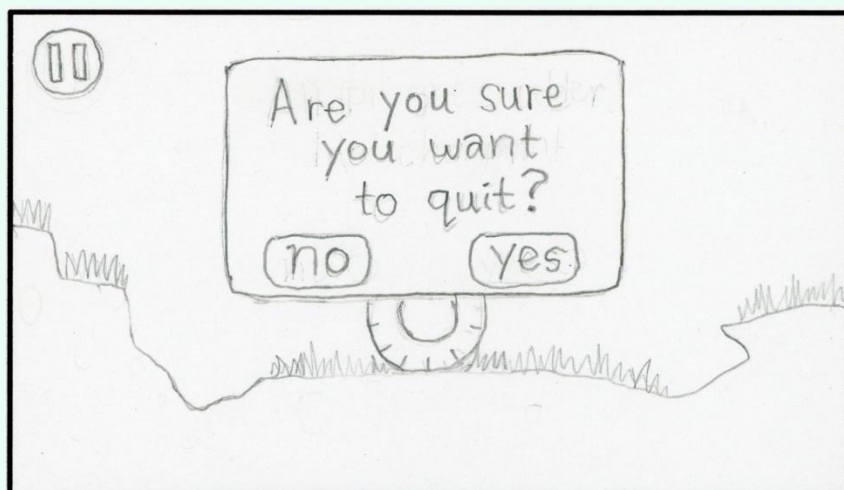
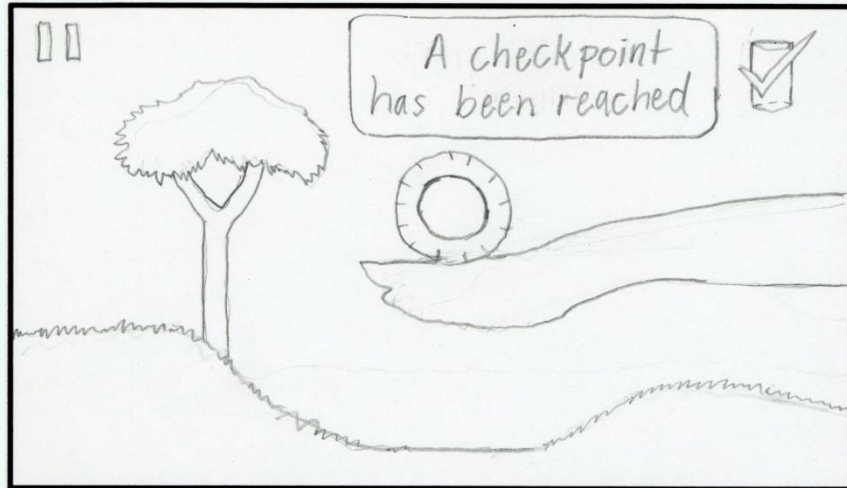


Figure 7 If user tries to go to main menu, they get a courtesy warning





**Figure 8 informing the user of the checkpoint symbol. This symbol will appear every time user progress saves**

As you can see below, the action type (shooting or jumping) is not final.

