An MIT Hacking Adventure

Produced by
Andre DeHon

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MASSACHUSETTS
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INSTITUTE OF TECHNOLOGY

1. General Overview

The world from the original problem was modified to provide the minimal framework necessary for a quick hacking adventure. Our intreped adventurer now comes in the form of James Tetazoo an amatuer roof and tunnel hacker ready to prove himself capable of pulling a major hack. Specifically he has set out to put Teela (Athena doesn't really need it in the student center cluser...especially since they're changing over to workstations soon) on top of the Great Dome (funny, quite a few hacks involve putting things on top of the Great Dome). Not to make things too easy for James, the campus police and physical plant workers are roaming around the institute attempting in varioius obscure ways to prevent hackers from flourishing at MIT. What would a hacking adventure be without doors that require more than just turning the knob to get through? Well, in order to successfully complete his hack, James will have to get through doors with locks that he doesn't have the key for (but that has never stopped a hacker before). As with all good hackers, James must will not damage or take any property (though he is moving one piece of it from one place to another).

2. Hacking Adventure World

The following building exist in Tetazoo's world:

- **Coffee Shop**: every hackers favorite place to meet before and after hacks
- **Athena Terminal Room**: a good place to look for a random 11/750
- **Great Dome Outside**: the final destination of many hacks
- **Great Dome Inside**: a place to set up before a hack goes outside
- **Building 66**: nice triangular building previously dubbed the USS Tetazoo
- **Machine Shop**: a useful place in the institute where many implements are crafted
- **Building E19**: a random administrative building where one can get cards
- **Building 36**: EECS building in which the 001 lab is located
- **Rod's Office**: Professor Brooks' office in Tech Square
- **Louis's Office**: Professor Braida's office over the 001 lab
- **Tech Square**: a big building on the northern part of MIT with lots of neat computers--however these are ignored for this adventure
- **Computer Lab**: the site of much late night tooling and considered by some to be a major cause of caffine addiction
- **EGG-Atrium**: a random room still unjustifiable
- **Building 10**: a major traffic site being in the middle of the Infinite corridor and under the Great Dome
- φρεδ: the best dorm on campus, know formally as East Campus Residential Housing, but no one calls it that -- also home for James Tetazoo
- **CP Head Quarters**: a bad place to go -- if you visit there you won't hack for a while (formerly heaven)
- **Basement**: usually a neat place to be, but not generally accessible in this adventure -- home for Physical Plant Workers (formerly dungeon)
- **CP Station**: a purposely misplaced building to provide general annoyance to James

-- still located where it replaced the Dean's office (rumors have it that the dean was eaten by a troll named GRENDEL, but since the dungeon has been renovated no one has been able to find the troll to question him)

3. Where did the Troll and Dean go?

The Troll and the Dean were not entirely appropriate for this setting so they were mutated in to more appropriate forms.

The Troll is now a nosy Physical Plant worker that takes people to CP Headquarters rather than eating them (there is a current debate raging about which is worse). He is satisfied by donuts rather than pizza (in the interest of our adventurer's well being, it is possible for him to return to the Coffee Shop and get another donut after the physical plant worker eats one). Since praying usually doesn't get you away from physical plant workers the pray option was changed to an opportunity to find a clever hacking exit. The physical plant worker likes donuts so much that he will in fact let the adventurer go more than once contrary to his statements to the effect he won't.

The Dean is now a nasty Campus Policeman (CP). He is no longer a person (well, by game definition) and as such cannot be affected by the Physical Plant worker (PP workers would have a bit of trouble taking a CP to the CP headquarters). He is paranoid about hacking implements (i.e. cards and slides) because his Sargeant told him to crack down on hackers and with the late night lifestyle of MIT students this is the only way he can identify hackers. Since he is under orders only to seize such implements, he does no harm to the wielder. He also leaves implements alone if they are not possessed by someone (he wants to see who comes back for them). It is also interesting to note that he assumes anyone without hacking instruments are not hackers and hence not to be bothered (he's gotten some flack for harassing grad. students recently). As such, he will even leave someone alone, even if he is carrying a mini-computer across campus (must be from operations!).

4. Access Control

Access control is where the key innovation in this hacking adventure comes from. For the sake of this adventure three kinds of accesses are defined:

1. Combination - character must know combination
2. Card - door is cardable, character must possess card
3. Slide - door is slideable, character must possess slide

Make-Place was modified to make it possible to limit the access to these places to various characters in the world. All Places start with no restrictions to their access, but such devices can be installed by send the a control-access message to them and the type of access to install (physical plant is good at this).

The Make-Person procedure was modified to reflect access control in several ways. Whenever the player issues a move command it checks to see if he has access to the place he wishes to move to by using a new procedure, access-move. Using the wand and escaping do not use this for moves (escape is supposed to represent a wild chance that increased senses and blind luck induced by the horrible encounter with the physical plant worker will inspire the player to escape in some obscure manner which he could not of otherwise--as such access control is unappropriate). Access control checks the new-place the player wishes to move to for access restrictions and then checks to see if the player meets such criteria. If it does the player performs the appropriate action (e.g. cards the door) and gets in. People were modified to contain a state variable that indicates whether or not they know the combination. They were also modified to accept messages to learn the combination (if the appropriate conditions are met), check to see if they know it, and request it from other people. If a person is in a room with someone else who knows it and requests the combination, he will learn it.

5. Creating New Objects

The slide necessary for James to get onto the Great Dome is not originally placed in his world. It does not initially exist. Instead of simply finding it, he must make it from the raw materials, a thin square piece of metal. The corner punch is special object implemented in order to allow him to do that. The corner punch is implemented similar to a thing, but it isn't really a thing. By not giving it a thing type, it cannot be picked up by an adventurer. It gets placed during its creation and can not be moved or owned. It supports the additional message make-slide which checks to see if there is a person with a piece of metal in the machine shop. If there is, it will remove the metal (it is used to punch the slide) and make a slide appear in its place; however, the player will have to pick the slide up if he wants to take it with him.

6. User Interface

Since most players won't want to bother typing all of the hairy Scheme message passing commands and all of the commands aren't available for direct manipulation by the characters, a set of user level commands are defined to make the program playable. Each of these commands are packaged with a call to the clock procedure so the user doesn't have to bother calling the clock every time he executes a commands. These commands are still wrapped in parenthesis as indicated, but are much easier to use. These are the commands defined at the user level:

- **(begin**) - starts a session by printing mission and opening a camera session
- **(quit**) - ends a session by closing the camera
- **(u**) - move player up if possible
- **(d**) - move player down if possible
- **(n**) - move player north if possible
- **(s**) - move player south if possible
- **(e**) - move player east if possible
- **(w**) - move player west if possible
- **(l**) - look around room
- **(i**) - show player's possessions
- **(exits**) - show all directions in which the character may attempt to go
- **(request**) - request the combo from everyone in the room
- **(make-slide**) - attempt to make a slide
- **(charges**) - show the number of charges in the wand
- **(recharge**) - recharge the wand if possible
- **(wave**) - wave/use wand
- **(get <object>**) - get the specified object for the player if possible
- **(drop <object>**) - if possessed, drop the object
- **(where <person>**) - announce the location of the person sought

7. General Solution

In order for the character to successfully *win* this Hacking Adventure he must get Teela on top of the Great Dome. In order to do this, he will have to at least do the following in some order or another:

1. get metal at φρεδ
2. get card in E19
3. card the door to the machine shop
4. make slide in machine shop from metal
5. get slide in machine shop
6. get Teela in Athena terminal room
7. card the door to the Inside of the Great Dome
8. slide the door to the Outside fo the Great Dome
9. drop Teela on the Great Dome

He will probably also need to:

1. get donuts in the student center
2. find Rod or Louis and request combination
3. use combination to enter computer room
4. get wand from computer room

8. Disclaimers

James Tetazoo is a mythical personage assossiated with Third East. Any resemblence between him and anyone in the *real world* is purely coincidental.

The world represented here is purely the product of the authors derranged imagination and is in no way intended to represent the real world.

This adventure was written for entertainment purposes only. The author is in no way encouraging such action to occur in the real world.

Table of Contents