Point your favorite browser to the URL where you have a web page with FTP access.

Spymasters may see a message which tells them to refresh their browser when the game starts. If in between rounds of a game, or game was not terminated, a CodeName board layout may be visible. You should always refresh your browser when the "Start Game" button has been clicked.
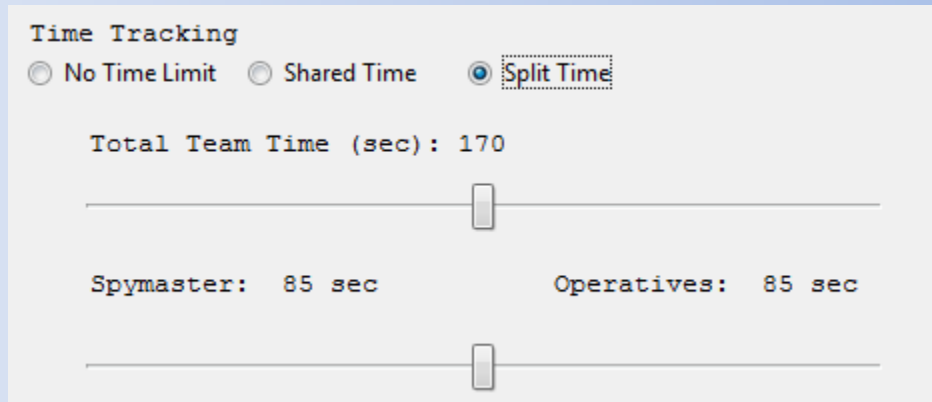
MAMMOTH	COOK	KNIFE	MASS	WAR
FAN	DANCE	NET	ANGEL	EGYPT
FLUTE	DISEASE	CAT	PLANE	TOKYO
EMBASSY	MOUNT	PRINCESS	FALL	ORGAN
RAY	BEAR	PIT	NOTE	SATELLITE

Spymasters see the entire board layout as above. Code words are overlaid with colors representing teams (blue/red), bystanders (yellow), and the assassin (black).

Settings

The Python version of CodeNames allows for multiple new settings which affect game play. The first of these options is "Time Tracking." Game play can be modified by selecting one of the radio buttons available (the default: No Time Limit leaves the game unchanged from the original board version).

However, if Shared Time or Split Time are selected, the length of each team's turn time is limited. The Split Time option from the Settings dialog box is shown below:
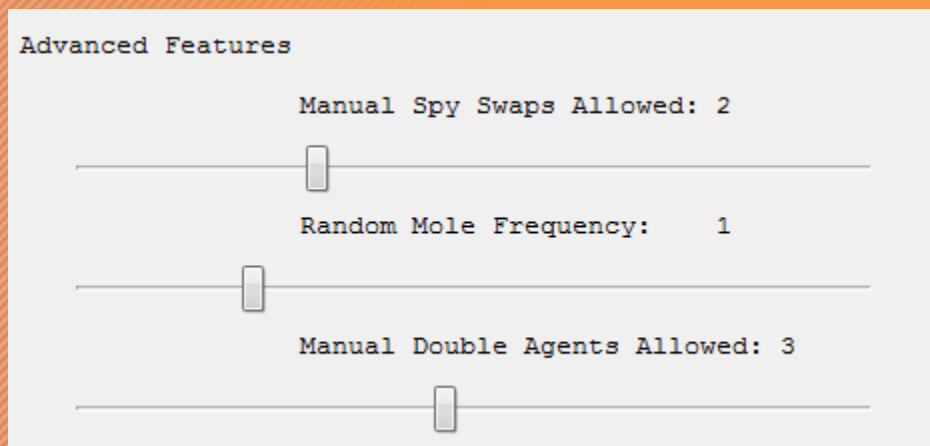
```
Time Tracking
  ○ No Time Limit    ○ Shared Time    ● Split Time

    Total Team Time (sec): 170

    ────────────────────[ ]────────────────

    Spymaster:  85 sec              Operatives:  85 sec

    ────────────────────[ ]────────────────
```

The Shared Time option is identical except for the additional configuration of total Total Team Time between the Spymaster and Operatives. Simply move the sliders to adjust how long each team's turn should last, and if using Split Time, how that time should be divided between the Spymaster and Operatives.

When Total Team Time left on the countdown time clock reaches 20 sec. an audible alarm will sound alerting players that time is almost up. When time is up, play automatically switches to the opposing team and their respective counter commences count down.

Note: When Split Time is selected, an audible alarm also sounds to alert players that the Spymaster's time is reaching the end when 5 seconds remain (in addition to the alarm which will sound after the Operative's timeout for the team's turn ending). Important: Although the game engine will automatically switch to Operative time count down when Spymaster time runs out, the switch must be made manually if there is still time on the Spymaster clock and he/she has finished giving a clue. It is of course in the opposing team's interest to enforce this during the game!

In addition to the excitement and tension added by timed play, "Advanced Features" provides for the further implementation of the intricacies of counter intelligence to the CodeNames game.
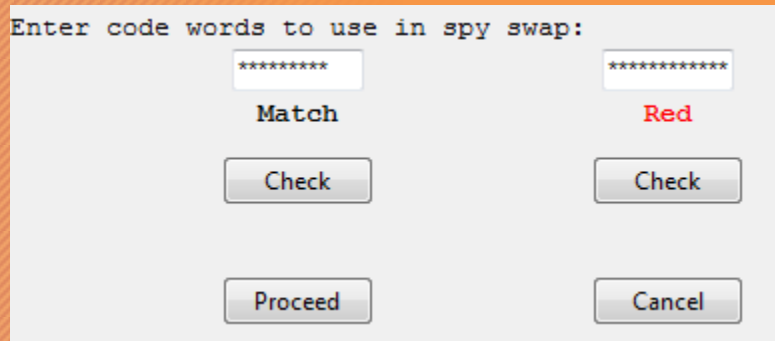
```
Advanced Features
                   Manual Spy Swaps Allowed: 2

    ──────────────────[ ]──────────────────

                   Random Mole Frequency:     1

    ─────────────[ ]───────────────────────

                   Manual Double Agents Allowed: 3

    ──────────────────[ ]──────────────────
```

In the real world, spy agencies sometimes engage in negotiations to allow for "exchanges" or "trades" to occur in order to recover assets and align with diplomatic channels.
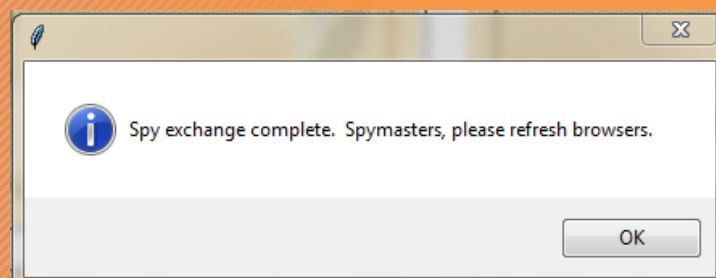
The Python version of CodeNames enables this through the Spy Swap feature. Just move the slider to adjust the number of Manual Spy Swaps Allowed to be between 0 and 8.

During a team's turn, the Spymaster may decide to click on the "Spy Swap" button which reveals a dialog. In the screen shot below, the Blue Spymaster has entered the code word for one of their contacts (and checked it – resulting in a Match being displayed) and the code word for one of their Red opponents (not yet checked – so still displaying the team color).

Note: To avoid players from potentially guessing the entries made by Spymasters, the code words are displayed as only asterisks in the text boxes. To further cloak entries, Spymasters can type additional "*"'s at the beginning and end of each word. Words may also be entered as any combination of capital and lower case letters. After code words have been entered and checked for accuracy and availability of agents (i.e., a bystander, assassin, mismatched blue/red agent, or typing error are not allowed) the Spymaster can click to "Proceed" or "Cancel."

After clicking "Proceed," a message will be displayed reminding Spymasters to refresh their browsers so the contact code words are properly displayed in their new colors.

As long as there are Spy Swaps remaining, they may be made any time by the Spymaster during his/her team's turn.

Why would I want to do a Spy Swap?

You may see a wonderful opportunity to create a clue resulting in multiple contacts being made if you had access to one or more of your opponent's code words. Alternatively, you may see an "obvious" multiple contact clue just waiting for your opponent to jump on during his/her turn and you decide to interdict!

Moles are everywhere – not just in your yard, but also amongst your most top secret and highly classified personnel! Since no one knows who a "good" mole is, they pop up randomly on both Blue and Red team code words by replacing the existing code word with a completely new one from words not currently being used on the game board. While the Spymasters will be able to "see" the team color associated with the word change, they have no control over when it happens or to which contact is changed.
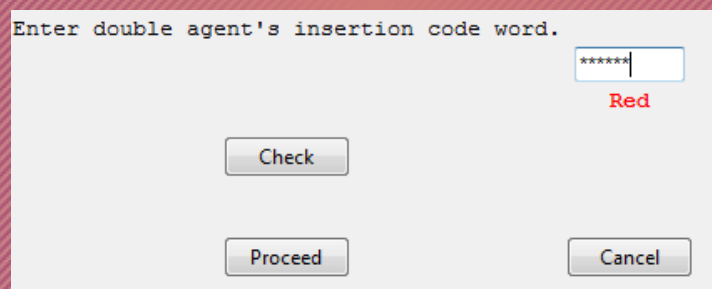
The "Random Mole Frequency" slider can be adjusted between 0 and 5. At the highest setting of 5, moles will appear about once per minute on average. At a setting of 1, they appear about every 5 minutes (the default setting of 0 disables the Mole feature).

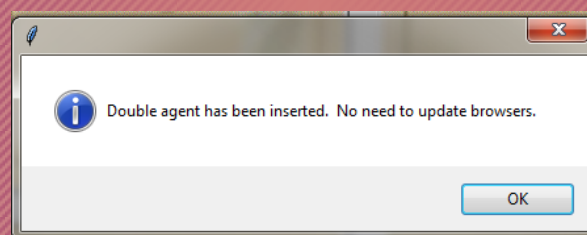**What purpose do moles serve (other than to destroy my yard)?**

Unlike in your yard where moles can knock you off your toes when you inadvertently plant your foot into one of their tunnels, the moles in Python CodeNames will keep you on your toes! As a Spymaster, you may have to adapt your clues and strategy based on a new code word popping up out of nowhere! Operatives who are deliberating on a clue and notice a mole may wonder if it should affect their choices. Moles don't really see well, so this varmint, err variant should make things look a little more blurry during game play. Happy hunting!

There probably is no better example of the double agent in the spy film genre recently than Charlize Theron in "Atomic Blonde." Now with Python CodeNames, you too can experience all the CIA thrill sensation of deploying a double agent into the field.

The number of Double Agents allowed in the game rounds is adjusted with the slider in Settings dialog from 0 to 8. During game play, the Spymaster may deploy one Double Agent during their team's turn by entering an opponent's contact code word (dialog window below shows Blue Spymaster inserting a Double Agent into the Red team).

Once verified and executed, the Double Agent remains active for one round of play (i.e., Blue inserted agent is removed after Red's turn is complete). If the opposing team makes contact with their agent who has been compromised, a contact is awarded to both teams.

Note: In this case, only the Spymaster making the insertion knows the code word (as asterisks are used in text entry). The board is not visually updated with any markers, so the opposing Spymaster does not know where the Double Agent is. The final restriction on the use of the Double Agent is that there must be at least two opposing team agents active to allow insertion (this prevents a guaranteed tie if the inserting team is also down to one contact remaining). Of course, there is always the possibility with this option that a tie in one round could result. In that case, the cold war continues!

C'mon – Do we really need to discuss in the open why a double agent might be used?

Parting Words

The final screenshot below shows an overview of the status/score display when all the options are utilized:

	BLUE	RED
Contacts Remaining	9	8
SpyMaster Time Remaining	60 s	85 s
Operative Time Remaining	85 s	85 s
Spy Swaps Remaining	2	2
Double Agents Remaining	4	4
Cumulative Team Time	25 s	
Team Score	0	0

Operatives Turn	Start Game	Red Turn

Spy Swap

Double Agent

Help	Pause/Resume	Settings

After the game has begun, the "Settings" menu will no longer be available. In addition to manually monitoring the switch between Spymaster/Operatives in Split Time play, teams also need to manually assign turns if time still remains after Operatives have made all their attempts at contact (In this case, the interested party is the team just completing their turn – to get the opposing team back on the clock ASAP!) During game play, the counters can be stopped at any time with the "Pause/Resume" button. This may be necessary if invoking penalties for invalid clues or play needs to be interrupted for any reason – any reason at all.