

THE BUG IS A LIE

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Book of Rules

A satirical take on software development based on the game “Bang!”. Rules are mostly unchanged; names of all elements have been changed to be relevant for software engineering.

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1 Introduction

1.1 About the Game

THE BUG IS A LIE is a card game for software engineers. It is a parody on the way software is developed in industry with a sarcastic view on the individual *roles* people take (Manager, Honest Developers and Evil Code Monkeys, and Consultants) and how they, more often than not, work against each other.

In the game, each player takes on one of these roles and tries to achieve a role specific goal. For example, the consultant tries to take over the company, while an evil code monkey tries to get the manager fired. Additionally, each player is assigned a *character* by chance, which provides special abilities.

The main battle ground revolves around bug reports, code fixes, and lame excuses why a bug cannot be fixed. Each player has a certain amount of mental health which gets down- or upgraded depending on the cards played. If mental health is zero, the player gets fired (and has to leave the game).

An additional twist in the game stems from the fact that only the role of the manager is known at the beginning of the game; all other roles are hidden and must be inferred from the actions of a player. Furthermore, players can build up prestige for defense against bug reports, and have a number of additional options for attacking other players.

1.2 Cards involved

The game consists of 100 cards:

Role Cards: There are 7 role cards (1 Manager, 2 Honest Developers, 3 Evil Code Monkeys, and 1 Consultant). These are used at the beginning of the game to give everyone a role to play. Role cards are colored **green**. The role cards determine the winning condition of the player:

- Manager and Honest Developers win if all Evil Code Monkeys and the Consultant are fired.
- Evil Code Monkeys win if the Manager is fired.
- The Consultant wins if all others are fired, the Manager last (otherwise, the Evil Code Monkeys win immediately)

Character Cards: There are 13 character cards, which give each player certain special skills. Character cards are colored **yellow**.

Action Cards: Action Cards are played and have an immediate effect on another player, or can be immediately used to deflect an attack performed by another player. Action cards are colored **black**. They can be separated as follows:

- 25 Bug Reports
- 12 Lame Excuses
- 6 Solution Cards
- 20 Special Action Cards (Refactoring, Owned, SI, Standup Meeting, Coffee Machine, LAN Party, Red Bull Dispenser, Heisenbug)

Ability Cards: Ability cards are colored **blue**. They contain a specific ability, which can be used by placing the card on the table in front of a player. There are 13 ability cards. One increases the player's protection against bug reports; the other 12 affect the (perceived) prestige of the player himself and his fellow co-players.

Stumbling Block Cards: The four stumbling block cards, if placed in front of a player, have to be dealt with by that player when it is their next turn. They must be handled by the player before he/she can do anything else. Stumbling Block Cards are colored **magenta**.

2 How to Play

2.1 Preparations

The use of role cards depends on how many players take part in the game.

- 4 Players: 1 Manager, 1 Consultant, 2 Evil Code Monkeys
- 5 Players: 1 Manager, 1 Consultant, 2 Evil Code Monkeys, 1 Honest Developer
- 6 Players: 1 Manager, 1 Consultant, 3 Evil Code Monkeys, 1 Honest Developer
- 7 Players: 1 Manager, 1 Consultant, 3 Evil Code Monkeys, 2 Honest Developers

All other role cards are irrelevant for the game.

The game is started by the following action:

- ⇒ Each player draws one character blindly. The manager must identify himself, but no-one else may do so.

Every person also has a certain character; there are 13 character cards in the game. Thus:

- ⇒ Every player draws one character card blindly. Each player must place this card publicly in front of him or her.

At the beginning of the game, each player has zero prestige and the number of mental health points indicated on his character card. The manager has one more than indicated on the character card. Third,

- ⇒ The action, ability and stumbling block cards are shuffled and piled up to build the stack.
- ⇒ Every player takes as many cards from the stack as he has mental health points.

Now, the actual game can begin. See section **role cards** for the goal of each player according to his role.

2.2 Playing The Bug is a Lie

THE BUG IS A LIE is a *turn-based game*. The manager always begins the game. On each turn, a player performs the following steps:

1. Deals with any stumbling block cards from other players.
2. Pops two cards (unless the player has a special ability) from the stack.
3. Plays cards (Abilities, Actions, Stumbling Blocks)
4. At the end, a player may only have as many cards on the hand as he has mental health points left. All others must be dropped on the heap.

Playing action cards (step 3) is the main part of a turn. Some of the action cards may be played for oneself, some for one other player, some for all other players; some cards take effect immediately, some are placed in front of players as “*stumbling blocks*” for their next turn. In general, a player may play as many cards as he likes in this step (see below for restrictions).

Some action cards are dependent on the prestige of both the player who is playing them and the player at whom they are targeted (see **Bug card** and **PWND card**). This is indicated on the card. In general, in such cases, the card can only be played if the prestige of the target player is the **same or lower** than the prestige of the player who plays the card.

The game ends when:

- **The manager is fired.** If there are any evil code monkeys left, the evil code monkey win (as one, including the ones already fired). If only the consultant is left, he wins.
- **All evil code monkeys and the consultant are fired.** In this case, the manager and the honest developers win (as one, including the ones already fired).

The individual phases of a turn are as follows:

2.2.1 Dealing with stumbling blocks

Other players may willingly or unwillingly place stumbling block cards on a player which he needs to take care of before really starting his turn. See section **stumbling block cards** below for details.

2.2.2 Popping cards from the stack

The player takes the top two cards from the stack. Whenever the stack runs empty, create a new stack by shuffling the heap.

2.2.3 Playing Cards

In this phase, the players can play ability, action, and stumbling block cards.

- ⇒ The player places any *ability cards* he wants to use on the table. Note that only one “*Previous Job*” card may be on the table per player.
- ⇒ The player plays *action cards*. Note that some cards for attacking someone directly are dependent on prestige. This is indicated on the card. A typical action is

- “Attacking” another player with a **Bug card**, claiming that a bug was found in his code (only a player with a lower prestige can be attacked). He or she must defend himself with a **lame excuse card** (or special ability, see special cards) – otherwise he or she loses mental health. Note that only one Bug card may be used per turn (if not for special ability of a player).
- The player may also play an arbitrary number of other *action cards*. These are detailed in the card section below.

⇒ The player plays *stumbling block cards*. Any stumbling block card may be placed in front of an arbitrary player.

Note that others may need to react to the actions of the currently active player, for example defending themselves with a lame excuse card. However, they may not play any cards except for “*Solution*” and “*Lame Excuse*” (their character card may give them more options, though) while it is not their turn. During this phase, a player may lose his last mental health point. In this case, he is fired and has to leave the game. All of his cards are piled onto the heap (if not for special ability of a player).

2.2.4 Finishing the Turn

At the end of a turn, a player may only have as many cards on the hand as he has mental health points left. All others need to be dropped on the heap. Note that between turns, a player may have more cards than mental health points.

3 The Cards

This section lists the cards present in the game.

3.1 Role Cards

There are seven **green** role cards; how many and which are used depends on the number of players.

- *The manager*. The manager heads the software development team; he is responsible for shipping the software and can rely on the honest developers and (to a degree) the external consultant. His goal is to get the evil code monkeys and the consultant fired so he can hire more honest developers.
- *The honest developers*. They believe in good design and shipping software. Thus, they help their manager getting the software finished and have the same goals as he.
- *The evil code monkeys*. They have no idea how to write good software altogether, but they don't want to be fired, so they try to fire the manager instead, hoping for one of them to be promoted.
- *The consultant*. The consultant tries to get everyone else fired so he can take over the department. He wins if no one else is left.

3.2 Character Cards

Every player is dealt one of the **yellow** character cards. These cards define the initial and maximum mental health points the player has. When playing “offline”, it is recommended to keep a number of coins or pens indicating the current number of health points. The current number of health points also indicates how many cards the player may have in hand.

Furthermore, each card defines a special ability the player has. This ability stays with him throughout the game and cannot be taken away.

- *Tom Anderson*. If he loses mental health, he may take a card from the stack.
- *Steve Ballmer*. He may use bugs as excuses and the other way round at any time.
- *Kent Beck*. He may, at any time, drop two cards to gain one mental health point.
- *Larry Ellison*. He takes three cards instead of two cards from the stack, but has to put one back onto the stack.
- *Holier than Thou*. He sees everyone with -1 prestige.
- *Steve Jobs*. He gets a second chance, which means that whenever he has to roll for a random number, he can roll a second time if he wants.
- *Larry Page*. When somebody gets fired, he takes all of the cards.
- *Bruce Schneier*. He may report an arbitrary number of bugs – and not just one.
- *Jeff Taylor*. Whenever the player has no cards on his hand, he can take one from the stack (it does not need to be his turn).
- *Linus Torvalds*. His Bug attacks can only be deflected by two excuses.
- *Terry Weissman*. With a chance of 0.25 a bug gets deflected for him.
- *Mark Zuckerberg*. If he loses mental health, he may take one card from the causer (whether in hand or on the table, except character and role cards).
- *Konrad Zuse*. He is seen with +1 prestige by everybody.

For more information on the characters, have a look at the **yellow** cards in the stack.

3.3 Action Cards

Most cards in *THE BUG IS A LIE* are action cards. The most common ones are:

- “*Bug (Report)*”. A bug report against another player causes him to lose one mental health point – if he has no lame excuse. He might actually lose a health point but be able to compensate this by immediately “getting help”, or by a special ability.
- “*(Lame) Excuse*”. An excuse can be played to block a bug report. In this case, nothing happens.
- “*Solution*”. A “*Solution*” card can be played in response to a bug report. In this case, although the bug is acknowledged (and the player loses one health point), the health point is immediately restored. A “*Solution*” card can also be played normally during a turn, in which case the player gains one health point (but no more than his maximum number).

Also, there are many special action cards:

- “*Helper cards*” for oneself:
 - *Personal Coffee Machine*. Playing this card allows the player to draw 2 new cards from the stack.
 - *Red Bull Dispenser*. Playing this card allows the player to draw 3 new cards from the stack.
- “*General assembly cards*” for everybody:
 - *Heisenbug*. Everybody is affected by this bug; it is a bug report against everyone. Thus, every player must come up with help or an excuse or lose one health point.
 - *LAN Party*. Everybody goes to party and thus gains one health point.
 - *Boring Meeting*. Everybody has to go to a boring meeting (and lose one health point) – if they are not able to claim that they are working on a bug (bug report card).
 - *Standup Meeting*. Everybody gets to pick new assignments: This means that for each player, a card is drawn from the stack and placed openly in the middle of the table. Now, starting from the current player, each player may take on of these.
- “*Attack*” cards against a specific player:
 - *Refactoring*. The current player has refactored some code of another player (ignoring prestige), effectively removing it. Thus, the player may remove one card of the other player (whether in hand or on the table, except character and role cards) and dump it on the heap.
 - *Pwnd*. The current player has Owned the system of the other player (the attacked player must have the same or lower prestige than the attacking player). He may therefore take one of the Owned players cards (whether in hand or on the table, except character and role cards) and keep it.
 - *System Integration*. The systems of the current and the other player got integrated (ignoring prestige). Each wants to make sure his system has fewer bug reports. In turns, both players play **Bug cards** until one runs out of bug cards or gives up although he still may have Bug cards (and loses a mental health point). The attacked player must play the first Bug card. The bugs cannot be delegated!

3.4 Ability Cards

Ability cards contain a specific ability, which can be used by placing the card out on the table. A player may only place these cards if it is his turn.

- *Bug Delegation*. This card acts as a shield against bug reports. A player may only place one *Bug Delegation* card in front of him. If a bug report comes in, the player calculates a random number (you know the probability distribution by now). If it lies under 0.25, he gets lucky and the bug gets delegated (i.d. the card is dropped onto the heap). Otherwise, the bug report has to be dealt with as usual.

The other ability cards all affect the player’s prestige. Firstly, there are the *Previous Job* cards which indicate where the player has worked before. A player may only place **one** of these in front of him, but he can replace his *Previous Job* when it is his turn. They indicate the prestige the player has because of this job. Note that the standard prestige (if a player has none of these cards) is zero. Secondly, the cards *Wears a Tie at Work* and *Wears Sunglasses at Work* can be used in a similar

way. A player may wear a tie and sunglasses at the same time, but he cannot wear several ties and several sunglasses (i.d. a player may only place one card of each type in front of him).

- “*Previous Job*”. Depending on the job, the player’s prestige rises to 1, 2, or 3. A special case is the *Accenture* card: In this case, prestige stays at zero, but the player gains the ability to play arbitrarily many **Bug** cards per turn.
- *Wears Tie at Work*. Wearing a tie commands respect in fellow co-workers. If a player places this card in front of him, all others add one to his prestige.
- *Wears Sunglasses at Work*. Wearing sunglasses is incredibly cool and instills a lot of self-confidence. Thus, the player who places this card in front of him may subtract one from the prestige of all other players. This only affects the sunglass-wearing player.

3.5 Stumbling Block Cards

“*Stumbling block*” cards are placed by the current player in front of himself or another player. At his next turn, the player first has to deal with the stumbling block. There are two stumbling blocks. The player must at first deal with the *Fortran Maintenance* stumbling block and then with *Off-The-Job Training*:

- *Off-The-Job Training*. The player is scheduled to be sent away for a training session. To avoid this, the player calculates a random number. If it lies below 0.25, the training is canceled, the card is placed on the heap, and everything continues normally. Otherwise, the player has to skip his turn (and the card is placed on the heap as well). He does not need to drop any cards.
- *Fortran Maintenance*. The player was selected to do some *Fortran Maintenance* in ancient company code. To avoid losing a lot of mental health over this, the player calculates a random number. If it lies below 0.15, the player has to do the maintenance and loses three mental health points, and the card is placed on the heap. If the number lies above 0.15, the Fortran Maintenance is given to the next player. The Fortran Maintenance card is not dropped onto the heap until someone has to do the maintenance.

3.6 Other Rules

There are some additional rules to follow:

- ⇒ If the **manager kills an honest developer**, he is punished by having to pile all of his hand cards onto the heap.
- ⇒ If a **player kills an evil code monkey** (even if the player is an evil code monkey himself), he may take three cards from the stack.
- ⇒ If **only two players are left**, “*Solution*” cards may not be used anymore.