

## SPOOFY INSTRUCTIONS FOR EDUCATORS

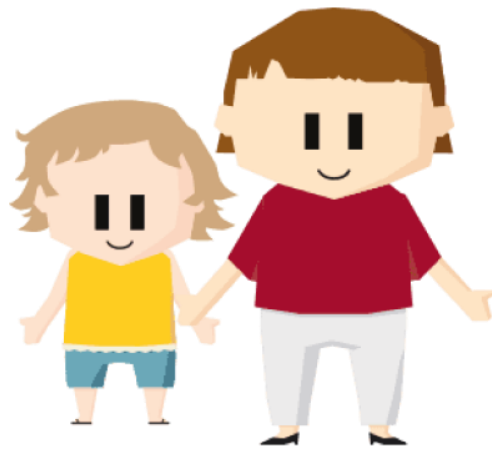
These instructions are meant for educators of different kinds. Here you can find information about the game, overviews of the worlds, additional assignments for using the game in class and other additional information.

### OVERVIEW OF THE GAME

Spoofy is a cybersecurity game with the goal to teach children about cybersecurity threats, behaving online and other issues related to smart devices. The game presents different scenarios, the player can collect cyberpets and do other fun things.

The target group for the game are younger school aged children, and with an adult, even pre-schoolers. The originally open worlds are playable separately and do not need a specific order. The school and birthday worlds are shorter and deal with only topics related to kids. The park and grandma's place are more complicated. Once all four worlds are completed, the cyber machine has been put together

and smaller children can play all the worlds again or finish playing. After the four worlds have been completed, a new fifth world opens up: this one is more complicated and is meant for older children, as it requires the player to definitely be able to read. All of the worlds are playable by all ages when playing with an adult.



### GENERAL RULES FOR PLAYING AND MOVING AROUND

The player can play five different worlds and move between the spaceship and each of the worlds. The first four worlds open up right away; the fifth opens later on. In the game, the player can play in four different worlds, and move between the world and the spaceship. Each world has its own individual assignments: solving cyber problems or collecting items. Solving assignments gives the player "experience," which turns into energy stars. Once the player has accumulated three stars, they can free a pet. The player can then put glasses and hats on the pets.

While walking around, the player can collect different items. They can be on the ground, on the table or given by characters in the game. Some items can be picked up only after certain assignments have been done. Items go into storage and are divided into two: necessary items and wearable items. Wearable items are marked with a top hat, other items should be kept until they are asked for. The player can wear the wearable items themselves or give them to other characters or pets. They can be removed later. Some wearable items turn up later, the game should be played multiple times. Once the cyber machine is assembled, all assignments are reset and can be done again. Each time the assignments are done, the world reset.

## FOCUS OF THE GAME

Cyber security is an important topic for everyone, including children. Many have smart devices themselves; computer and internet are also taught in schools. Even though many internet websites presume the users are 12 years old, often children go there earlier. Also, many play various online games, use school forums and other media. So it is important to explain to children at an early age how to behave on the internet and what are the dangers. Therefore this game focuses on three following important aspects.

**The internet is not separate from real life.** Social media posts and general behaviour online influences people in real life as well. Money spent on the internet is real money, words said and posted online have an effect on people, and you can do real harm online. It is part of cyber security to make people understand that children understand the consequences of their actions: a friend gets hurt, unpleasant information spreads, or one ends up as a victim of a crime.

**Not everyone online is your friend.** Children meet different people online, many of them are old or new friend, but it is also important to teach that there might also be bad people who don't seem like that initially. Therefore, it is important to be careful when accepting friend requests but it is also important to know in general that there are criminals on the internet. Even though children don't have contact with hacking and cybercrime themselves, it would be good to inform them of these topics.

**Ask an adult for help.** Children don't often know or dare to ask an adult for help. Maybe the parent does not know how to solve this particular cyber issue but they can look further. Children experience different things online that they cannot yet explain, therefore it is vital to get help from parents.



## THE FIRST WORLD – THE SCHOOL

In the school world, the cyber hero has to help children and adults in school and around it. The main focus of the world is how to behave on the internet. There are many items to pick up (headphones, a stuffed rabbit, and wearable items), five smaller and one big assignment. The world is short and does not require a lot of planning.

### OVERVIEW AND GOALS OF THE ASSIGNMENTS IN THE SCHOOL WORLD

- The first three assignments are outside and deal with these three topics: do not post photos of other people on the internet, one must communicate politely online, and strange profiles exist. You can get necessary items from outside to go back into the school.
- The next three assignments are about communicating online and the cyber hero also finds the parts of the fake profile. One of the messages is to always talk to an adult when there is a problem.
- The last assignment is outside again, solving the fake profile. The main goal is to teach that strange friend requests should not be accepted.

### ADDITIONAL CLASS ASSIGNMENTS

The main topic of the school world is communicating on the internet so there is room for multiple discussions that focus on kids' own experience and polite communication.

For example, questions:

- 1) What is the different between communicating online and face to face?
- 2) Can children put up a photo of a teacher?
  - a. It is important to stress here that the person taking the photo is also the owner of the rights but they should still not upload it without the photo subject's permission.
- 3) What to do when people get bullied online?
- 4) What could happen if you accept a friend request from someone you don't know?
  - a. The stranger could bully or harass, could share your personal information, or turn out to be a criminal.

As communication is also part of some of the other worlds, one can also focus on one of the two other topics: bullying and fake profiles.



- 5) Idea for an assignment: children cooperate to write down a plan as to what to do if they see someone get bullied online. Could be a group or pair assignment. This is followed by a discussion with the teacher as to how they themselves should behave online and who to ask for help.
- 6) Assignment: what could be the ways to determine if the friend request is from a real friend?
  - a. Is the photo familiar? Name familiar?
  - b. Is there a possibility to see mutual friends? Ask them if they really know this person.
  - c. Ask an adult for help!

## THE SECOND WORLD – THE PARK

In the park world the cyber hero has to mostly help adults and the focus is on cyber security. There are some collectible items as well but it is also possible to start with assignments right away. The assignments don't repeat themselves but the theme of cyber security is almost everywhere. The world is longer than the first and several assignments need for the cyber hero to talk to multiple people and some assignments require previous ones to be completed.

### OVERVIEW AND GOALS OF THE ASSIGNMENTS IN THE PARK WORLD

- In the beginning, three assignments are open, all in the top part of the game. The goals are privacy-related: what information to share on photos, how to secure a device and one assignment about hacking. The goal of that one is to introduce the topic to the children.
- One of the key assignments is money; the goal is to teach that children cannot spend their parents' money without asking for permission
- One two-part assignment deals with photo sharing again – who is allowed what. The assignment looks at sharing photos when you are the author and on the photos, and when it is someone else's photo.

## ADDITIONAL CLASS ASSIGNMENTS

The main topic of the Park is safety, so the topics for discussion are a slightly more grown up.

- 1) What kind of pictures are suitable for the internet?
  - a. The author of the photo and the people on it have to consent to the upload
  - b. All parties should like the photo
- 2) Why do we need passwords for our devices? What is a good password like?
  - a. The longer the better. A good password is at least 12 characters long
  - b. Being complicated is also good: letters, numbers, different characters
  - c. Do not share your passwords with others
  - d. Different devices and different accounts have to have different passwords. Why?
- 3) Shopping online – who is paying?
  - a. Buying things
  - b. Spending money in online games
- 4) What is privacy?
- 5) What is hacking? Is it good or bad?
- 6) An idea for an assignment: children list all their accounts and change them into different passwords. Individual assignment.



## THE THIRD WORLD – AT GRANDMA'S

Grandma's world focuses on online scams and criminal activities. The assignments are not very long but are more grown up than in the first two worlds. The topics of the world are maybe a bit complicated for pre-schoolers but it is still worth a play. The activities in the world take longer, the play through is about 15-20 minutes.

### OVERVIEW AND GOALS OF THE ASSIGNMENTS IN GRANDMA'S WORLD

- There are two assignments in the beginning, outside the house. One of them is a constant one and starts with a photo uploaded online. The other assignment is about sharing spam mail.

- There are two assignments inside the house: grandma and grandpa. The former deals with friend requests but grandpa's assignment has two options: one can pick correctly right away and buy the simpler and more expensive ladder, or to pick incorrectly and buy the cheaper one. The first moves the game on but the other opens an additional assignment that deals with computer viruses. The virus assignment also has two options: if one clicks correctly, the man gives the cyber hero the hammer but if one clicks incorrectly, the computer gets infected, and the player has to bring antivirus software from the house and only then the man gives the hammer. It would be useful try all options with the kids.
- The main assignment of the world is to look for the missing goose and egg and finding and handing over the criminal to the police. It is not essential to find the goose to finish the world but gives extra experience. One assignment is to take a photo of the criminal. This is where it would be recommended to discuss with the kids that this is different from real life.

### ADDITIONAL CLASS ASSIGNMENTS

The focus of this world is very grown up but several topics are important to children as well. As there are some topics here that are not covered elsewhere in the game, it is important to cover the most important things during discussions.

- 1) What possible bad things could happen on the internet?
  - a. Scams, criminals, viruses
- 2) What to do so that you would be safe online?
  - a. Virus protection, not accepting strangers' friend requests, no pictures with personal info, be careful.
  - b. It is important to stress to the kids that bad things could happen to everyone online, but one has to be careful.
- 3) What to do when something happens?
  - a. Tell an adult: parent, teacher.
  - b. Introduce the web police.
- 4) Shopping online
  - a. What and when to buy?
  - b. It should be stressed that adults should be consulted but they should also be critical themselves.
- 5) Assignment in a computer class: how do I know this computer is safe? Look for virus protection etc.
- 6) Assignment about online shopping: make a list of things to keep in mind when buying something. Working in groups, pairs
  - a. What page is this? How much does it cost? What is seen on the photos etc.



## THE FOURTH WORLD – BIRTHDAY PARTY

The birthday world repeats several topics covered before: passwords and device safety, sharing photos online, shopping online. The world is not more complicated or difficult than others, it is more suitable for children, similar to the school world. The world is short and suits also the younger children.

### OVERVIEW AND GOALS OF THE ASSIGNMENTS IN THE BIRTHDAY WORLD

- In the beginning, there are several assignments outside that repeat earlier topics. When one takes the hat to the boy at the gate, it starts an assignment that takes the cyber hero indoors.
- Inside has an assignment about online shopping and this time the focus is on free vs paid items. The goal is to warn children that free does is not always the right way to go.

### ADDITIONAL CLASS ASSIGNMENTS

The focus of the world is suitable for all children, discussions can match their level.

- 1) Why do we need passwords for our devices? What is a good password like?
  - a. The longer the better. A good password is at least 12 characters long.
  - b. Being complicated is also good: letters, numbers, different characters.
  - c. Do not share your passwords with others.
  - d. Different devices and different accounts must have different passwords. Why?
- 2) Shopping online – free or not free?
  - a. Why free things are often not good?
  - b. What to keep in mind when shopping?
- 3) Caring for one's devices.
  - a. How to take care of computers, tablets, and phones?
- 4) Assignment for myself: what should I do to make sure my devices don't break? A group assignment, an individual assignment
  - a. Assignment about online shopping: make a list of things to keep in mind when buying something. Working in groups, pairs. What page is this? How much does it cost?



## THE FIFTH WORLD – THE STREET

The street world opens up once all the other worlds have been played. This is not a compulsory part of the game, because it requires the player to be able to read. The main themes of the world are online scams and false information: bad apps, protecting one's accounts with WiFi and passwords, and copying from the internet.

### OVERVIEW AND GOALS OF THE ASSIGNMENTS IN THE STREET WORLD

- This world offers multiple assignments that deal with fraud on the internet: the characters get fake messages and emails, and they also deal with bad apps in the store.
- One of the most important topics is how to protect oneself: choosing the right WiFi and how to protect one's accounts. All these assignments form part of the main sequence of assignments.
- One assignment deals with copying material from the internet: why one shouldn't do this and how using artificial intelligence is also wrong if it is not allowed by instructions.

### ADDITIONAL CLASS ASSIGNMENTS

This world deals with multiple topics already discussed, but there are some new questions that can be elaborated on in class.

- 1) What to look for when downloading an app from the internet?
  - a. Make sure you have the exact name of the app you are looking for.
  - b. The apps should be highly rated, with many reviews and regular updates.
- 2) Which Wi-Fi network to use?
  - a. A secured network is better than an unsecured one.
  - b. It is important to know whose network you are using.
  - c. Is it correct behaviour to go to a café and just ask for the WiFi password? This could be a longer conversation.
- 3) How to recognise a phishing email?
  - a. Who is writing to me? How do I find out? Does it match with the sender's address/phone number I had before?



- b. Does it tell me that I need to act quickly? If so, these kinds of emails are suspicious.
  - c. What information does the seller want/give? Is anything suspicious?
  - d. How can I check the information that has been sent?
- 4) How can I get my homework done faster?
- a. Copying from the internet is fraud.
  - b. Even a little bit is wrong.
  - c. Information found online could be fake. You always need to check it yourself.
  - d. Using artificial intelligence is not allowed unless so stated.

Additional assignments to elaborate on the topics

- 5) Assignment: Fix all of your passwords and, if possible, add multifactor authentication.
- 6) Research assignment: What is multifactor authentication and where can I use it?



## IMPORTANT THEMES IN THE GAME

The main goal of Spoofy is to get children thinking about cyber hygiene topics and to give them instructions on how to behave in certain complicated situations. There are multiple different kinds of assignments in the game, but there are also ever-present topics that should be discussed with children both at home and at school.

### SHARING PHOTOS

When taking and sharing photos, it is important that the kids keep in mind:

- 1) Whom they are taking photos of and does this person know this;
- 2) Do not post photos of other people, especially if they are embarrassing.
- 3) Do not post photos with personal information: name, phone number, address etc.  
Also do not post information that can attract thieves or nudity.

Another topic to discuss with kids would be to never send anyone photos of themselves wearing skimpy outfits or nudity. Also, not to share these kinds of photos of others, children or adults. It is advisable to not share photos of oneself to strangers in general, always discuss with an adult first. Internet is full of suspicious people who collect photos of children or organise “modelling competition” or send photos of themselves in return. Children should also tell an adult when they get photos from someone.

### FRIEND REQUESTS

People get many friend requests; children are no different. Therefore, it is important that they can critically evaluate, which are good requests to accept. Adding the wrong people can give them additional information and access. Therefore, it is important to stress that they should

know the person in real life or at least in a game or similar. If the photo and name are familiar but the profile seems strange, they should also be careful and ask for additional information because there are many fake accounts going around.

When they meet an internet friend in real life, they should always consult an adult first, especially if the “friend” asks them not to.

## FREE THINGS

There are many free things, ads and good offers on the web. Many of them are scams.

- 1) Free things offer come with viruses or other malware. If it should not be free (like a movie, for example) and someone else is charging for it, the free one is suspicious.
- 2) „Share this and you might win,” is usually a scam. Even if you get the reward right away, the sharing is still not a good idea.

If something seems like too good to be true, it usually is.

## COMMUNICATING ON THE INTERNET

Communicating on the internet is no different from the offline world, one must be polite. But one has to think of additional consequences, children should keep in mind the following:

- 1) When writing something or uploading a photo on the web, there will always be a trace of it.
- 2) Words said online have the same impact as things said in real life – insulting someone online is not kinder.
- 3) You cannot keep track of shared information: you must be careful with what you share and with whom, but you must also keep in mind that others might share your information further.

## PASSWORDS AND MULTIFACTOR AUTHENTICATION

All devices and accounts should be password protected. You must remember three things:

- 1) All passwords must be unique, each account has to have a different password.
- 2) Passwords must be long and complicated.
  - a. At least 12 digits
  - b. Letters, numbers, and other symbols.
  - c. Don't use easily recognisable things like your name, name of a family member etc.
- 3) Do not share your passwords with anyone, maybe only your parents.
- 4) One way to protect one's account is using multifactor authentication. This means that you need something else in addition to a password. For example, a message is sent to your phone, or you need something physical (such as your ID card or Smart ID) or something biological (like your fingerprint). With this additional layer, it is much more difficult to hack into your account.

## SCAMS ON THE INTERNET

The number-one internet threat right now is scams. This often means phishing emails and messages or the spreading of false information. It is important to be vigilant at any age and to keep in mind the main rules of cyber hygiene.

- 1) Always be careful when selecting a WiFi network, downloading apps or reacting to messages.
- 2) Fake messages can come via email or SMS, through instant messengers or even as phone calls.
- 3) It is important to always double-check the information through a different channel before reacting.
- 4) Some common signs of scams are:
  - a. a surprising sender;
  - b. the phone number or address is different from the sender's usual one;
  - c. being prompted to react quickly; and/or
  - d. vagueness in details.
- 5) Never send money based on just one email or message.
- 6) Children should always discuss any suspicious messages with their parents, especially when money or data are involved.

## HACKING

Hacking is any misuse of computer to get access to someone's computer or system. Hackers can have ethical goals but often they are malicious. Hacking usually requires computer skills and knowledge but there are also those who purchase readymade assets on the internet and use them for their goals. Hacking is usually illegal so hackers are often greeted by police at their doors, and hackers are considered criminals.



## THE GAME – WHERE AND WHAT?

Here is an overview as to where one should go while playing the game and where to click. Answers to all the questions that children might get when playing and getting stuck or lost.

### THE SPACE SHIP

In the beginning of the game, the player learns all the main activities. The robot gives instructions about using the control panel, and collecting and wearing the items. The player can use the control panel to choose the cyber hero, choose the world, change the language and volume, and to later buy cyber pets. The control panel also has the button for resetting the game if that is what the player wants.

### THE SCHOOL WORLD

- 1) The first class has headphones that need to be taken to the boy in the class next door.
- 2) The next activity is outside, access through the door bottom of the screen.
- 3) There is a girl on the right with an assignment about photos.

- 4) There is a caretaker by the street with an assignment about internet communication. The caretaker will give a key that opens a locked classroom.
- 5) There is a boy by the swing-set who has an assignment that can be solved inside and he gives a magnifying glass for it.
- 6) Next to the boy is also a stuffed rabbit that goes to the boy inside the school.
- 7) The key opens the locked door on the top of the screen, behind it is the principal with a communication assignment. The principal will give the hero a wearable hat.
- 8) The magnifying glass assignment is in the classroom to the right. The end result is hair that needs to be taken to the boy outside.
- 9) The cyber machine part is in the first classroom which finishes the world.
- 10) There are different wearable glasses, hats and a moustache in the world. Some appear later during the game.

## THE PARK

- 1) There is a lady by the ice cream cart who has an assignment about spending money online. The solution has four steps:
  - a. The girl with the teddy bear by the tables. She will give the player clothes and will wait for a bow.
  - b. The clothes should be taken to the woman top of the screen who will give the player money.
  - c. The money goes back to the woman by the ice cream cart, she will give flowers in return.
  - d. The bow comes from solving the tablet owner assignment.
- 2) There is a man in a wheelchair top of the screen, he has a tablet looking for an owner. The owner can be found using the dog photos on the tablet and she is on the right. She will give the player the bow for the little girl and a hat for a future assignment.
- 3) Top of the screen also has an assignment on internet photos, this will provide the player with chocolate.
- 4) On the right side there is a bush and in there is a stop sign that needs to be taken to the construction worker in the bottom right who has a hacking related assignment.
- 5) The girl with the bear will give an ice cream for the bow.
- 6) The ice cream and the hat go to the women waiting by the photo booth, they have a photo related assignment and once that has been done, keep an eye on the young man who picks up the women's photo. He is the last assignment and this provides the player with a decoration.
- 7) The chocolate, flowers and decoration have to be taken to the mayor who is waiting by the big cake and who will give the missing cyber machine part. This will end the world.
- 8) The world has hats that can be found and worn.

## AT GRANDMA'S

- 1) The long assignment of the world starts at the empty coop, where the first part is about a photo but the player must also find the egg and the goose.
- 2) After the coop, the player should talk to the police officer who is nearby. The police officer gives the hero a camera and instructions. Before proceeding with that, some other assignments have to be done inside the house and in the yard.

- 3) In bottom left there is a group of kids who have a spam related assignment and the solution gives the player a flashlight.
- 4) Near the kids is a bush and there is the missing goose.
- 5) In the house is grandma who has an assignment related to friend requests and the reward is a key.
- 6) The key, camera and flashlight are needed to find the thief. Once all items are collected, the player has to go to the shed, outside and bottom left. Inside is the thief and the player has to take a photo of him and take it to the police officer. There is also a rake in the shed and that is needed later.
- 7) The police officer gives the player the missing egg and this (with the goose) should be returned to the owner. This step is not necessary for completion of the world.
- 8) Inside the house is also grandpa, he has an assignment about shopping online, it has two different solutions:
  - a. If the player chooses the expensive and boring ladder, the assignment is done, grandpa gives the ladder to the cyber hero and they can finish the world.
  - b. If the player chooses the cheaper and shinier ladder, it turns out to be broken and now a hammer is needed.
  - c. The hammer assignment is with the man waiting by the shed, there are again two solutions:
    - i. If the player closes the ads, the hero gets the hammer.
    - ii. If the player clicks on the hammer, the computer gets a virus and the hero has to get the antivirus.
    - iii. Antivirus is inside the house, with grandpa. After taking that to the man, the hero gets the hammer.
  - d. Grandpa will exchange the hammer for the ladder.
- 9) The ladder and rake are needed by the tree outside, the cyber machine is up in the tree.
- 10) The world has different headgear and a face scarf; can be found on the ground and as rewards for assignments.

## THE BIRTHDAY

- 1) The first assignments are outside by the presents and the cake. The cake task is about sharing photos and gives the hero some chocolate.
- 2) The birthday girl has a password assignment that gives the hero a party hat that should be taken to the kid at the gate. He has an assignment about a lost device and safety. The reward is some popcorn.
- 3) Inside the house is a boy by the computer who has a downloading assignment. Solving it correctly leads to them needing their mom from the kitchen; the mom wants first the popcorn and her handbag in the bedroom. Mom will give the hero tickets and a pamphlet.
- 4) The tickets, pamphlet and chocolate go to the man waiting by the fishing game outside, he will give the player a fishing rod in return.
- 5) The fishing rod should be taken left of the house where the missing cyber machine part is.

Now the first four worlds have been completed and younger children can go and play them again. There is also now a new world open, for children aged 10+.

## THE STREET

- 1) The main focus of the world is opening up the safe, which starts with talking to the police officer. The officer sends the player to speak to the electrician and, after that, to the fire fighter. Once both of their assignments have been solved, the police officer gives the safe to the player.
- 2) The electrician needs a flyer for their assignment: you can get it from the young person standing next to the hardware store, top left.
- 3) The safe needs to be fixed and opened. In order to fix it, the player must solve the store owner's assignment (the hardware store, top left), which grants the player a screwdriver. In order to open the safe, the necessary gemstone is provided by the girl standing near the safe. Both assignments are already open when the game starts.
- 4) There is an older lady inside the store: she has an assignment dealing with scams and hands out a wearable item.
- 5) There is a young woman at the bottom of the park who has an assignment dealing with plagiarism and artificial intelligence, and she also hands out a wearable item.
- 6) Once the safe is open, a code card emerges and the player can take it back to the spaceship.

Now all the worlds have been completed. All of them can be played again, as the assignments will provide new wearable items.

