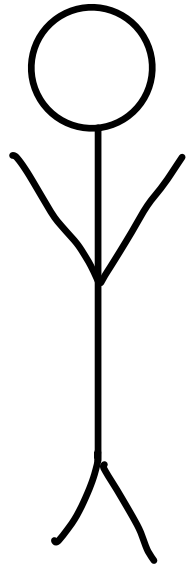# Konzepte

Use - Case - Diagramm

System

Animal are singing song , Old Mac Donald with their typical sounds
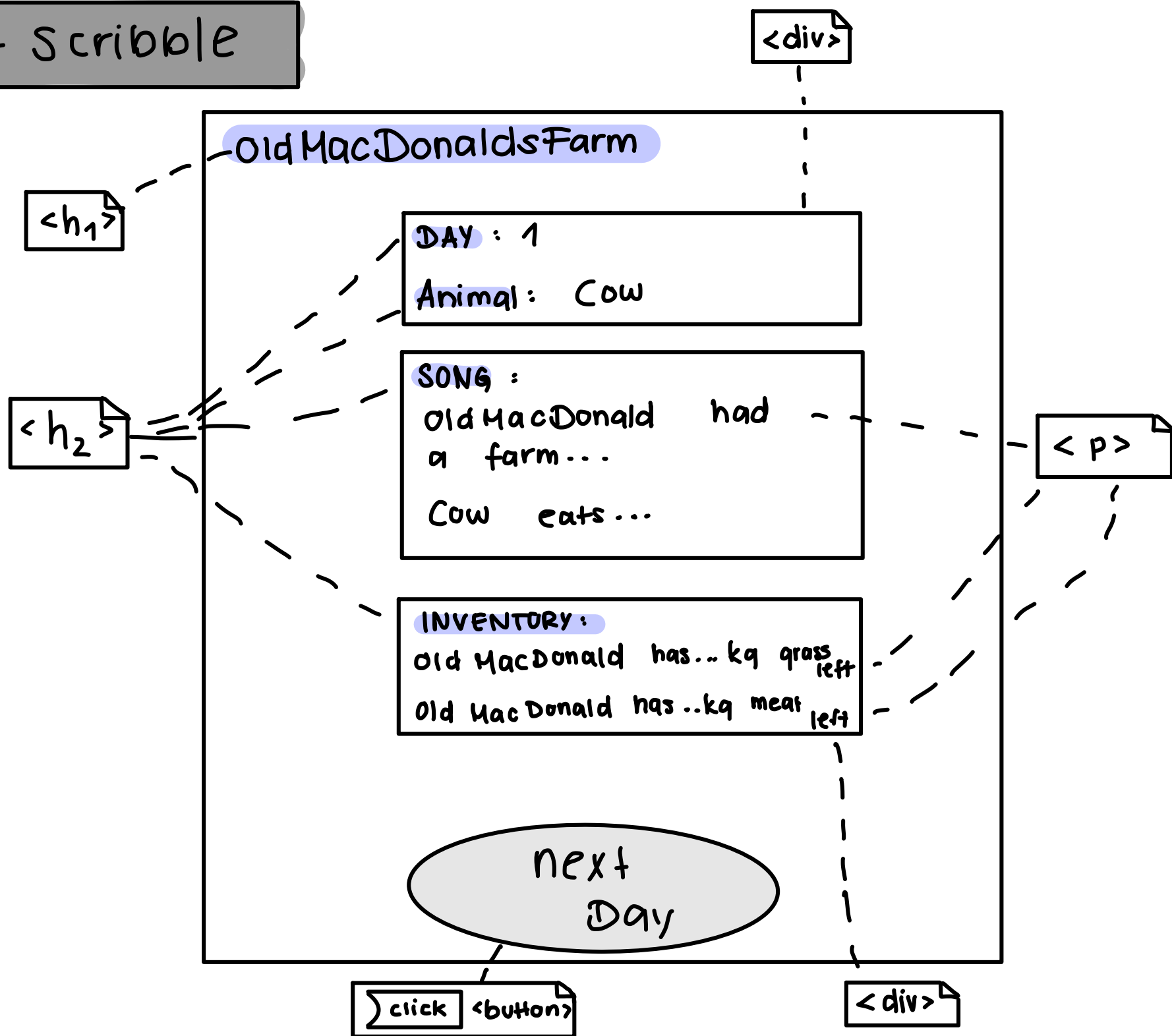
Animal is eating and remaining is displayed

Animals are performing special action

UI - Scribble

OldMacDonaldsFarm

<h1>

<h2>

<div>

<p>

<div>

DAY : 1

Animal : Cow

SONG :

Old MacDonald had
a farm...

Cow eats...

INVENTORY:

Old MacDonald has... kg grass left

Old MacDonald has..kg meat left

next Day

click <button>

Animal

name: string;
food: number;
sound: string

constructor (_name:
string , _ food: number,
_ sound: string,
_ specialAction: string)

eat(): void;
sing(): void;

cow

do SpecialAction()
: void)

Chicken

do SpecialAction()
: void

Pig

doSpecialAction
(): void

Dog

do SpecialAction()
: void

**Cat**

do SpecialAction()
: void

Aktivitätsdiagramm

main

```
counter : number = 0;
let inventory amount: inventory [];
let max Grass: number = 100;
let max Meat: number = 20;
let max Grains: number = 20;
let day: number = 1;
let special Action = HTML Element;
```

```
let animals: Animal [] = [];
let chicken: Chicken = new Chicken (t...);
let cow :  cow  = new Cow (t...);
let pig :  pig  = new pig (t...);
let dog :  dog  = new dog (t...);
let cat :  cat  = new cat (t...);
```

push chicken, cow, pig, dog, cat in animals array

load

handle Load

click
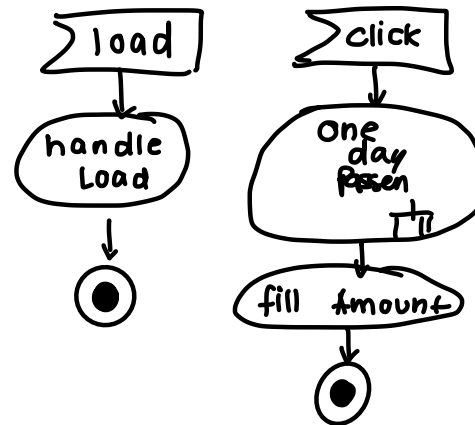
one day Passen
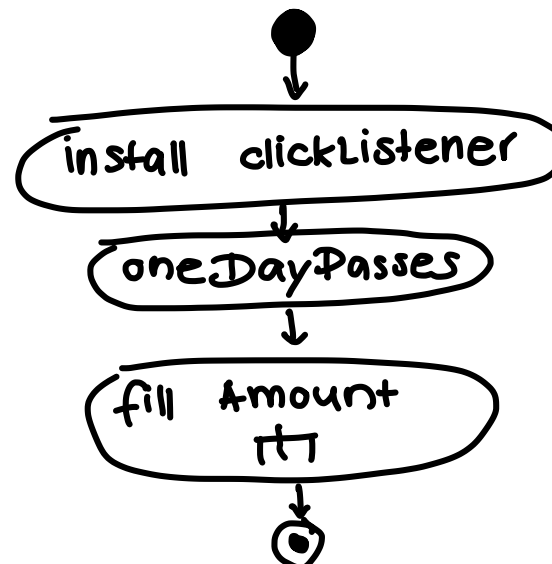
fill Amount

fill Amount

```
inventory Amount + Max Grass
inventory Amount + Max Meat
inventory Amount + Max Comba
inventory Amount + Max Grains
```

handleload

install clickListener

oneDayPasses

fill Amount

oneDayPasses

let animal first item in animals array

```
animal.sing ();
animal.eat ();
animal.dospecial Action ()
```

Animal

constructor

```
_name:          string
_food:          number
_sound:         string
_specialAction: string
```

```
this.name = _name;
this.food = _food;
this.sound = _sound;
this.specialAction = _specialAction;
```

sing

create new div Element and set class of div to song

set inner HTML of div

append div to body

eat

[this.food > stockAmount]

[this.food > stockAmount]

let eating: HTMLElement

console.log

eating = this.name + "eats" + _food

Cow

do Special Action

specialAction = "the cow gave 10 litres of milk "

console.log

Chicken

do Special Action

specialAction = "the chicken laid 9 eggs "

console.log

Pig

do Special Action

specialAction = "the pig rolls in dirt "

console.log

Dog

do Special Action

specialAction = "the dog barks "

console.log

Cat

do Special Action

specialAction = "the cat plays a lot "

console.log