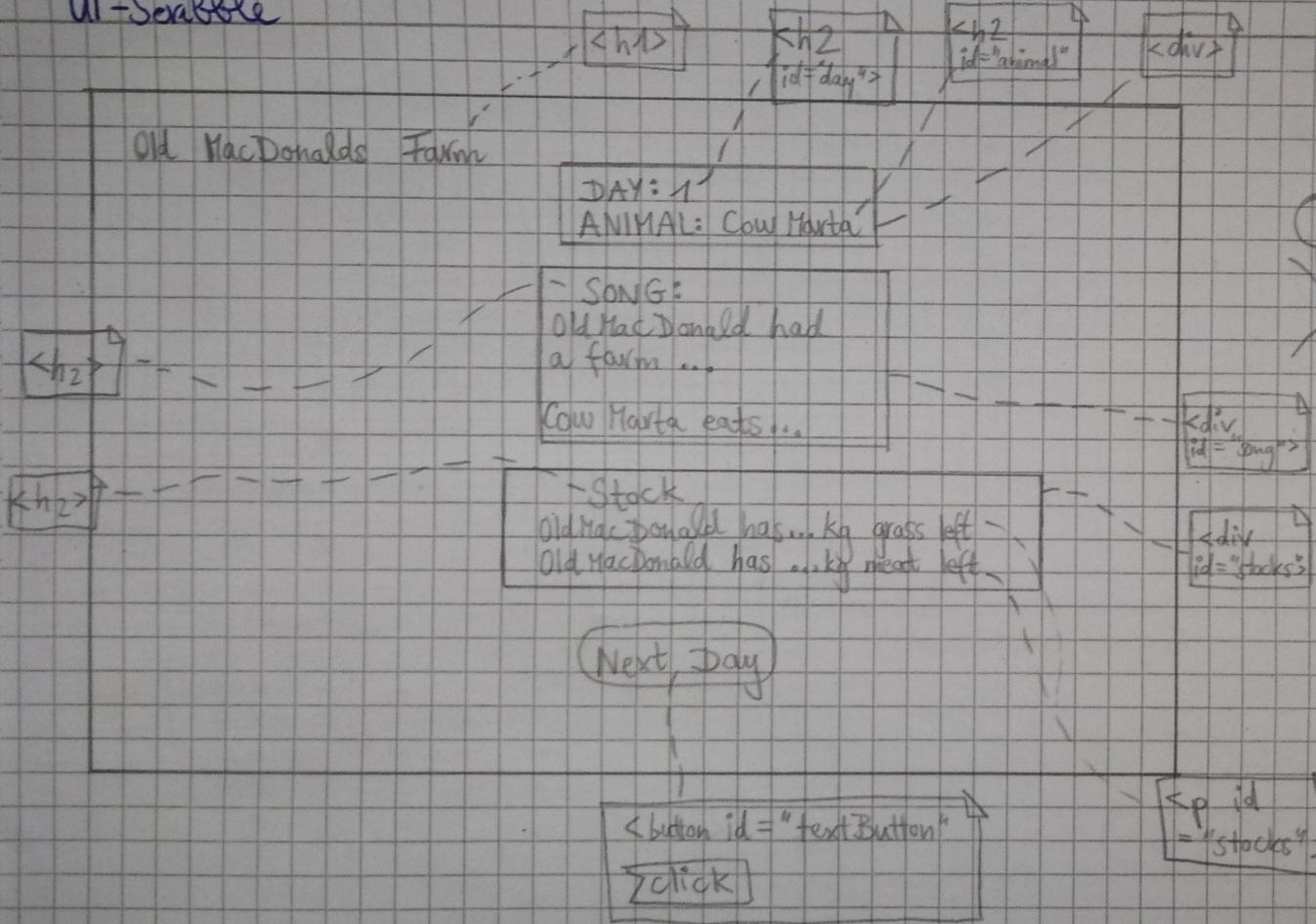


In Zusammenarbeit mit Evelin
Sinner & Linda Bentz

L09.1 - Old MacDonalds Farm

UI-Scribble



Use-Case

System

Seite lädt die Tiere fangen an das Lied „Old MacDonald“ mit ihren typischen Geräuschen zu singen

Tier frisst

verbleibender Vorrat wird angezeigt

Class Diagramm

Animal

name: string
breed: string
sound: string
food: number

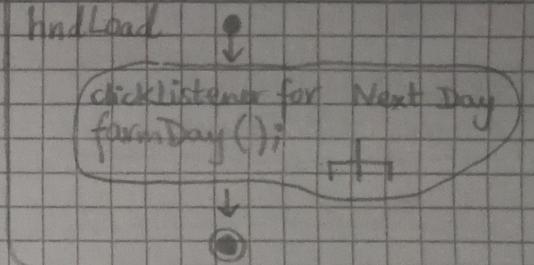
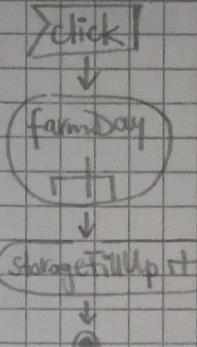
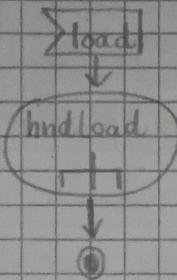
constructor (name: string, breed: string, sound: string, food: number);
sing(): void;
eat(): void;

In Zusammenarbeit mit Evelin
Sinner & Linda Bentz

Farm: Activity Diagramm

Farm

```
Counter: number = 0;  
let stockAmount: Stock[];  
let maxGrass: number = 100;  
let maxMeat: number = 20;  
let maxCompost: number = 90;  
let maxGrains: number = 20;
```



fillAmount

```
stockAmount + maxGrass  
stockAmount + maxMeat  
stockAmount + maxCompost  
stockAmount + maxGrains
```

farmDay

```
let cow: Animal = new Animal  
("Bentz", "Cow", "moo");  
...  
(create variables with every  
single animal with their characteristics)
```

method sing() and eat() for
each animal with setTimeout

```
let dayCounter: HTMLElement
```

Counter ++

storageFillUp

fillAmount ++

In Zusammenarbeit mit Evelin
Sinner & Linda Bentz

Animal

Sing

```
let nameAnimal: HTMLElement  
let song: HTMLElement
```

nameAnimal = this.breed + this.name
Song = "lyrics" + this.sound + "lyrics"
+ this.breed

Constructor

```
-name: string;  
-breed: string;  
-sound: string;  
-food: number;
```

this.name = name;
this.breed = breed;
this.sound = sound;
this.food = food;

eat

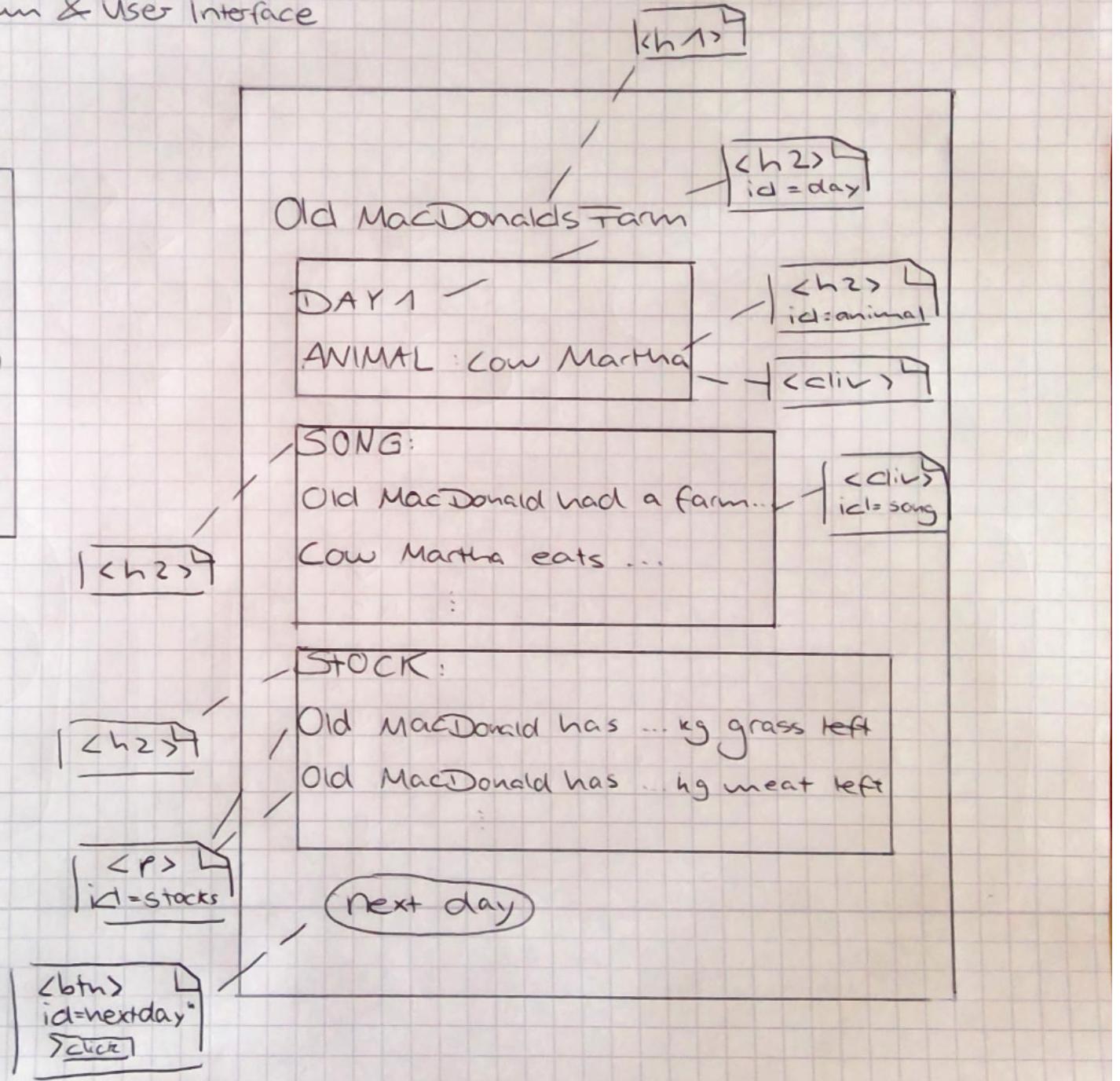
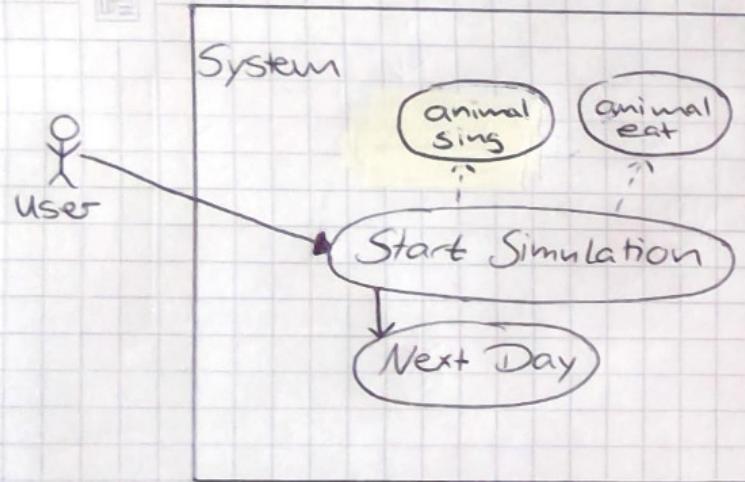
[this.food > stockAmount]

console.log ("Not enough food for the animal")

[this.food
<= stockAmount]

let eating: HTMLElement
eating = this.name + " eats " + food

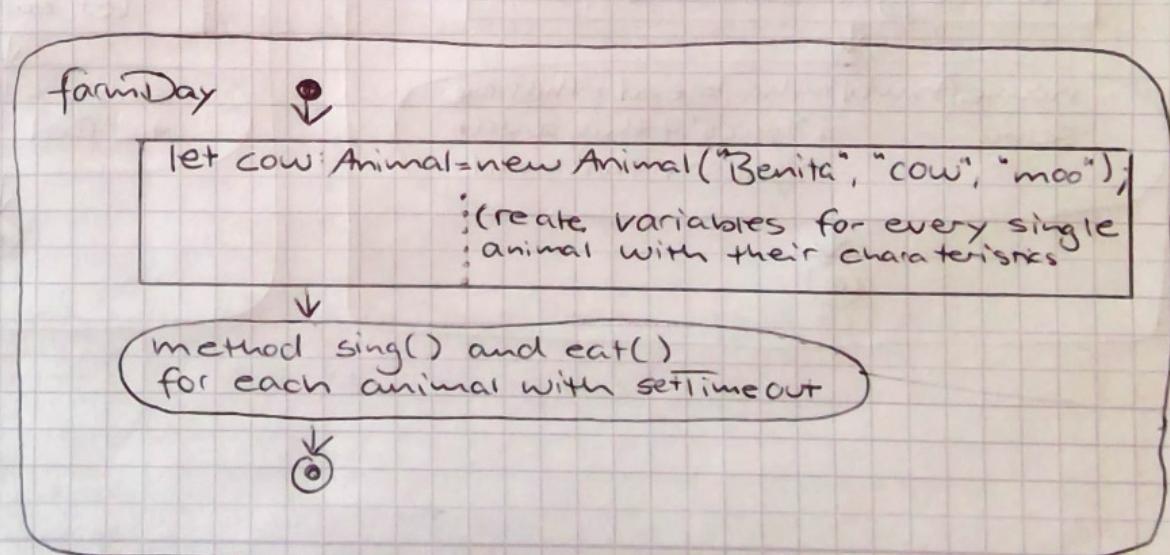
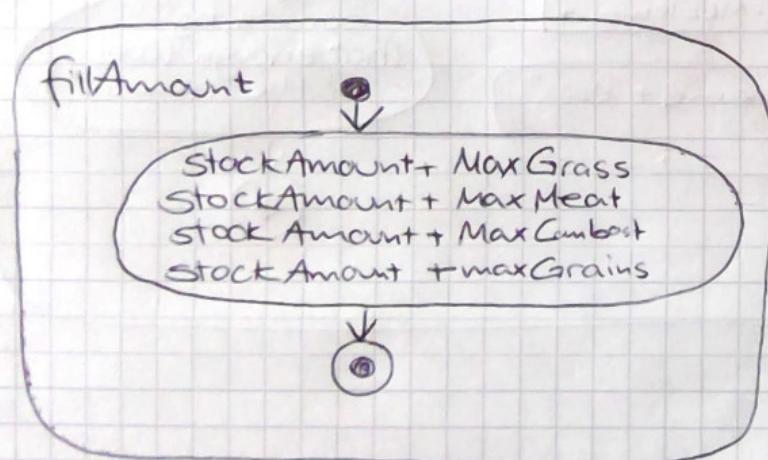
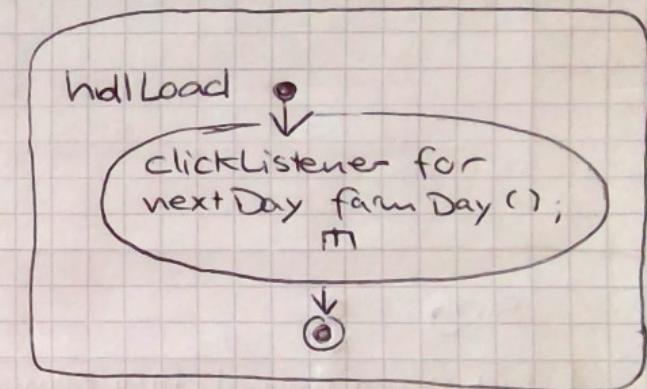
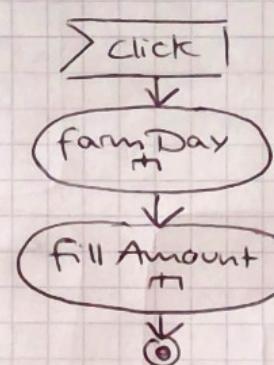
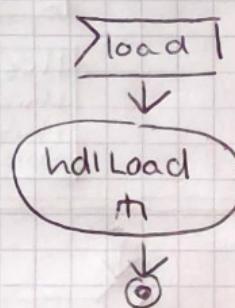
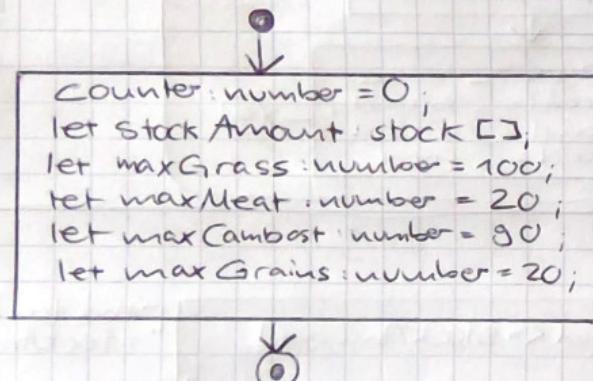
Farm: Use-Case-Diagram & User Interface



Farm: Activity Diagram

BRUNNEN

Farm



Animal

name: string;
breed : string;
sound : string;
food : number;

constructor(-name:string,-breed:string,
-sound:string,-food:number)

sing():void;

eat():void;

Animal

constructor

```
-name: string;  
-breed: string;  
-sound: string;  
-food: number;
```

```
this.name = -name;  
this.breed = -breed;  
this.sound = -sound;  
this.food = -food;
```

Sing

```
let nameAnimal: HTML Element  
let song: HTML Audio Element
```

```
nameAnimal = this.breed + this.name  
song = "lyrics" + this.sound +  
      "lyrics" + this.breed
```

eat



```
[this.food <= stockAmount]
```

```
let eating: HTMLElement
```

```
eating = this.name + "eats"  
      + - food
```

```
[!this.food > stockAmount]
```

```
console.log  
(not enough food  
for the animal")
```