WEBTECHNOLOGIEN

Risiko Artur Ott, Markus Büchler

STRUCTURE

- * HTML
- * CSS
- * Bootstrap
- * JavaScript / jQuery
- * AJAX
- * Websockets
- * Polymer
- * Vue
- * Authentification
- * Deployment
- Weiteres
- * Demo

HTML

```
<b>Phase 4: Gebietskarte ziehen
Eei erfolgreicher Eroberung mindestens eines Landes erhält der Spieler eine Gebietskarte.
<h3>Die Chancen eines einzelnen Angriffs lassen sich mit Mitteln der <a href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">href="https://de.wikipedia.">hre
```

Auszug aus description.html

- Sehr einfach
- Spielbeschreibung, Spielregeln
- Silhouette

CSS

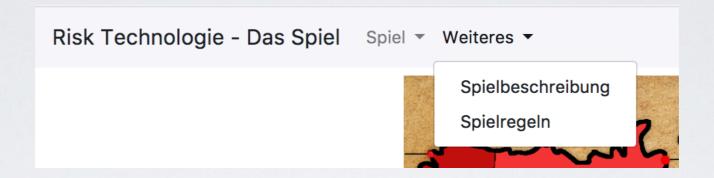
```
@media (min-width: 840px) {
    .map_scale {
        font-size: 0.4em;
    }
    .dices {
        font-size: 70px;
    }
    .h4em {
        height: 3em;
    }
    .h6em {
        height: 4em;
    .w10em {
        width: 8em;
    }
}
```

```
.RED {
    background-color: #ff2020;
}
.YELLOW {
    background-color: #ffe900;
}
.GREEN {
    background-color: #60FF76;
.BLUE {
    background-color: #8095FF;
}
.PINK {
    background-color: #F766EF;
}
.ORANGE {
   background-color: #FA943F;
```

- Skalieren der Map
- Anzeigen der Würfel
- Elemente wie Button etc.

Auszug aus game.less

BOOTSTRAP



- Erste Implementierung mit Bootstrap
- Später Anpassung an Silhouette

Risk Technologie - Das Spiel Spielregeln Spielbeschreibung Bonus Markus Büchler Sign out

JAVASCRIPT/ JQUERY

```
function createDices(dicesContainer, landNames, dices) {
    $(dicesContainer).show();
    $(dicesContainer).html("");
    dices.forEach((player, index) => {
        let playerDicesHTML = document.createElement("tr");
        $(dicesContainer).append(playerDicesHTML);
        let landName = document.createElement("td");
        $(landName).text(landNames[parseInt(index)]);
        $(landName).css("font-size", "0.2em");
        $(landName).css("padding-right", "lem");
        landName.setAttribute("valign", "center");
        $(playerDicesHTML).append(landName);
        player.forEach((dice) => {
            let diceHTML = document.createElement("td");
            $(diceHTML).addClass("dice");
            $(diceHTML).html(dicesValues[Math.floor(Math.random()*6)]);
            diceHTML.setAttribute("valign", "center");
            $(playerDicesHTML).append(diceHTML);
       });
    });
    let inter = setInterval(function () {rollDices(dicesContainer);}, 100);
    setTimeout(function() {
        clearInterval(inter);
        $(dicesContainer).children("tr").each(function (index, playerDices) {
            $(playerDices).children("td.dice").each(function (diceIndex, diceValue){
                $(diceValue).html(String(dicesValues[dices[parseInt(index)][parseInt(diceIndex)] - 1]));
           });
        });
    }, 1000);
```



```
$(document).ready(function () {
   $("#game name").keyup(activateGame);
   $("#game name").on("propertychange input", activateGame);
   $("#games").change(activateGame);
   getGameList();
   setInterval(function() {getGameList();}, 1000);
});
function getGameList() {
   $.get($("#games").attr("url"), reloadGameList);
function reloadGameList(data) {
   let games = Array.from(JSON.parse(data));
   let selected = $("#games").val().toString();
   $("#games").html("<option></option>");
   $("#games").attr("disabled", "disabled");
   for(let i = 0; i < games.length; i++) {</pre>
        let option = document.createElement("option");
        option.value = games[i];
        $(option).text(games[i]);
        if (games[i] === selected) {
            option.setAttribute("selected", "selected");
        $("#games")[0].appendChild(option);
        $("#games").removeAttr("disabled");
```

```
function connectToWebsocket(receiveMethod) {
   let websocket = new WebSocket($("#websocket").text());
   websocket.setTimeout;
   websocketInitEvents(websocket, receiveMethod);
    return websocket;
function websocketInitEvents(websocket, receiveMethod) {
   websocket.onopen = function(event) {
        logging.push("Connected to Websocket");
   };
   websocket.onclose = function () {
        logging.push("Connection with Websocket Closed!");
        clearInterval(websocketInterval);
   };
   websocket.onerror = function (error) {
        logging.push("Error in Websocket Occured: " + JSON.stringify(error));
   };
   websocket.onmessage = function (e) {
        logging.push(e.data);
       receiveMethod(e.data);
   };
```

```
function websocketMessages(data) {
   let message = JSON.parse(data);
   if (AllowedMessages.indexOf(message.type) === -1) {
        return;
    switch (message.type) {
        case "MessageTypeList":
            AllowedMessages = message.value;
            keepAlive();
            break;
        case "Ping":
           break:
        case "UpdateMap":
            map data = message.value;
            map draw();
            break:
        case "PlayerList":
            $(user list).html("");
            let userTable = document.createElement("table");
            userTable.className = "halfFontSize";
            $(user list)[0].appendChild(userTable);
            let userTbody = document.createElement("tbody");
            userTable.appendChild(userTbody);
            let users = Array.from(message.value);
            for (let i = 0; i < users.length; <math>i++) {
                let user = users[i]:
                let userTr = document.createElement("tr");
                userTbody.appendChild(userTr);
                let userColor = document.createElement("td");
                userColor.className = "playerColor mr- " + user[1];
                userTr.appendChild(userColor);
                let userName = document.createElement("td");
                $(userName).text(user[0]);
                userTr.appendChild(userName);
            break;
```

```
def receive = {
 case models.MessageModels.SetPlayer(prop, uuid) => this.createPlayer(prop, uuid)
 case models.MessageModels.StartGame(uuid) => this.startGame(uuid)
 case models.MessageModels.ClickedLand(uuid, land) => this.clickedLand(uuid, land)
 case models.MessageModels.MoveTroops(uuid, troops) => this.moveTroops(uuid, troops)
 case models.MessageModels.EndTurn(uuid) => this.endTurn(uuid)
 case models.MessageModels.ResetTransfereTroops(uuid) =>
   if (uuid.toString().toUpperCase.equals(gameLogic.getCurrentPlayer. 1.toUpperCase)) this.actionLand = ""
 case models.MessageModels.DragTroops(uuid, landFrom, landTo, troops) => this.dragTroops(uuid, (landFrom, landTo), troops)
 case _ => println("GameManager: Unknown Message!")
def update() {
 gameLogic.getStatus match {
    case Statuses.INITIALIZE PLAYERS => this.initializePlayers
   case Statuses.GAME INITIALIZED => this.gameInitialized
   case Statuses.PLAYER SPREAD TROOPS => this.spreadTroops
   case Statuses.PLAYER ATTACK => this.playerAttacking
   case Statuses.DIECES ROLLED => this.rolledDices
   case Statuses.PLAYER CONQUERED A COUNTRY => this.conqueredACountry
   case Statuses.PLAYER CONQUERED A CONTINENT => this.conqueredACountry
   case Statuses.PLAYER MOVE TROOPS => this.transfereTroops
   case Statuses.NOT ENOUGH PLAYERS => {
     println("NOT ENOUGH PLAYERS: " + players.size)
   case => println("Update: " + gameLogic.getStatus)
```

```
def receive = {
  case msq: String => {
   val json: JsValue = Json.parse(msg)
   (json \ "type").asOpt[String] match {
      case None =>
      case Some(messageType) => MessageTypes.stringToValue(messageType) match {
       case None => println("No type: " + msg + ", " + MessageTypes.stringToValue(msg))
        case Some(messageTypeValue) => messageTypeValue match {
          case MessageTypes.Ping => out ! Message("Ping").toJson
          case MessageTypes.StartGame => gameManager ! models.MessageModels.StartGame(uuid)
          case MessageTypes.Click => gameManager ! models.MessageModels.ClickedLand(uuid, (json \ "message").asOpt[String].getOrElse(""))
          case MessageTypes.MoveTroops => gameManager ! models.MessageModels.MoveTroops(uuid, (json \ "message").asOpt[Int].getOrElse(1))
          case MessageTypes.TransfereTroops =>
           val landFrom = (json \ "message" \ "landFrom").asOpt[String].getOrElse("")
            val landTo = (json \ "message" \ "landTo").asOpt[String].getOrElse("")
            val troops = (json \ "message" \ "troops").asOpt[Int].getOrElse(1)
           gameManager ! models.MessageModels.DragTroops(uuid, landFrom, landTo, troops)
          case MessageTypes.ResetTransfereTroops => gameManager ! models.MessageModels.ResetTransfereTroops(uuid)
          case MessageTypes.EndTurn => gameManager ! models.MessageModels.EndTurn(uuid)
         case => println("Wrong message type: " + messageTypeValue)
  case models.MessageModels.PlayerList(list) =>
   val message = Message("PlayerList")
   val messageArray: StringBuilder = new StringBuilder
   messageArray.append("[");
   list.foreach(player => {
     messageArray.append("[\"");
      messageArray.append(player. 1);
      messageArray.append("\", \"");
      messageArray.append(player. 2);
      messageArray.append("\"], ");
   })
   messageArray.setLength(messageArray.length - 2)
   messageArray.append("]");
   message.messageObject(messageArray.toString)
   out ! message.toJson
```

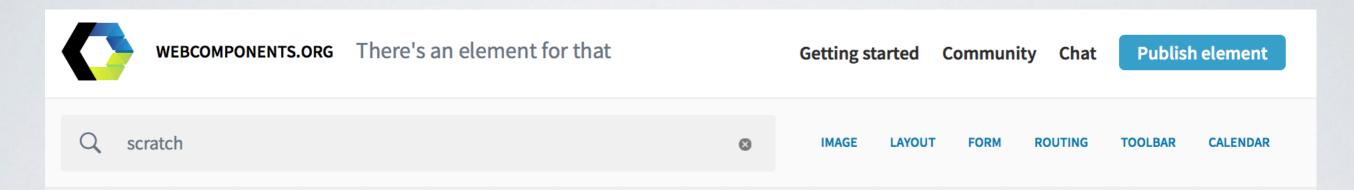
POLYMER

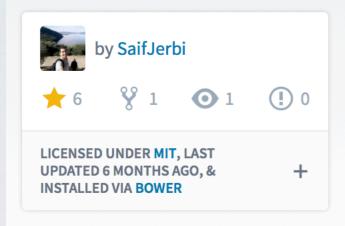
```
<link rel="import" href="../../bower_components/polymer/polymer-element.html">
<dom-module id="polymer-custom-string">
  <template>
    <style>
      :host {
        display: block;
     }
    </style>
    <h2>Hello [[prop1]] ! Markus was here</h2>
  </template>
  <script>
    /**
     * @customElement
     * @polymer
     */
    class PolymerRiskSampleApp extends Polymer.Element {
     static get is() { return 'polymer-custom-string'; }
     static get properties() {
        return {
          prop1: {
            type: String,
            value: 'everyone'
          }
        };
    window.customElements.define(PolymerRiskSampleApp.is, PolymerRiskSampleApp);
  </script>
</dom-module>
```

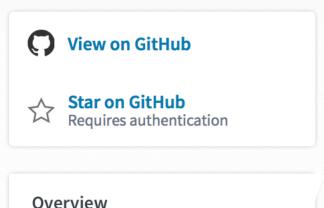
<polymer-custom-string></polymer-custom-string>

POLYMER

• There's an element for that







scratch-card [v1.0.1 \$

Scratch card is based on HTML5, it generates canvas on the fly and is optimized for all modern browsers and has touch support for mobile devices. You can use it to make scratch cards, coupons, promotionnal game and even advertisement.

README.md

webcomponents.org published

Scratch card is based on HTML5, it generates canvas on the fly and is optimized for all modern browsers and has touch support for mobile devices. You can use it to make scratch cards, coupons, promotionnal game and even advertisement.



```
<h3><div class="col-md-5" id="bar-1">{{ message }}</div></h3><h3><div class="col-md-3" id="bar-2">{{ message }}</div></h3><h3><div class="col-md-2" id="bar-3">{{ message }}</div></h3>
```

```
function spreadTroops(message) {
   barElement1.message = message.value.player;
   barElement2.message = "Ausrüsten";
   barElement3.message = message.value.troops;
   logging.push("player: " + message.value.player + " troops: " + message.value.troops);
}
function playerAttacking(message) {
   barElement1.message = message.value;
   barElement2.message = "Angreifen";
   barElement3.message = "";
   logging.push("attacking player: " + message.value);
}
function playerConqueredCountryMove() {
   barElement1.message = "";
   barElement2.message = "Verschieben";
   barElement3.message = "";
}
```

markus.buechler@mail.de

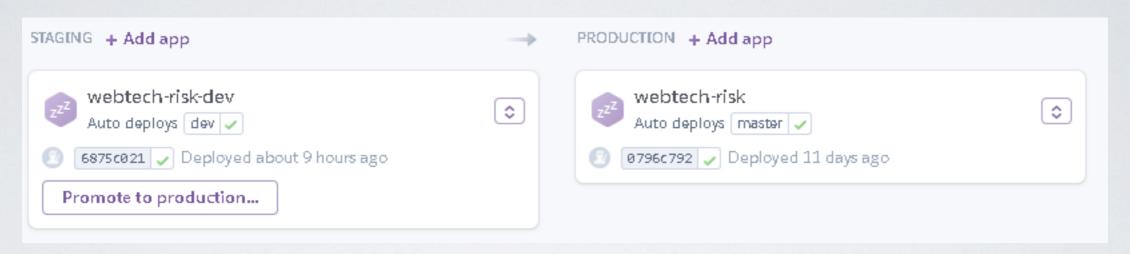
Ausrüsten

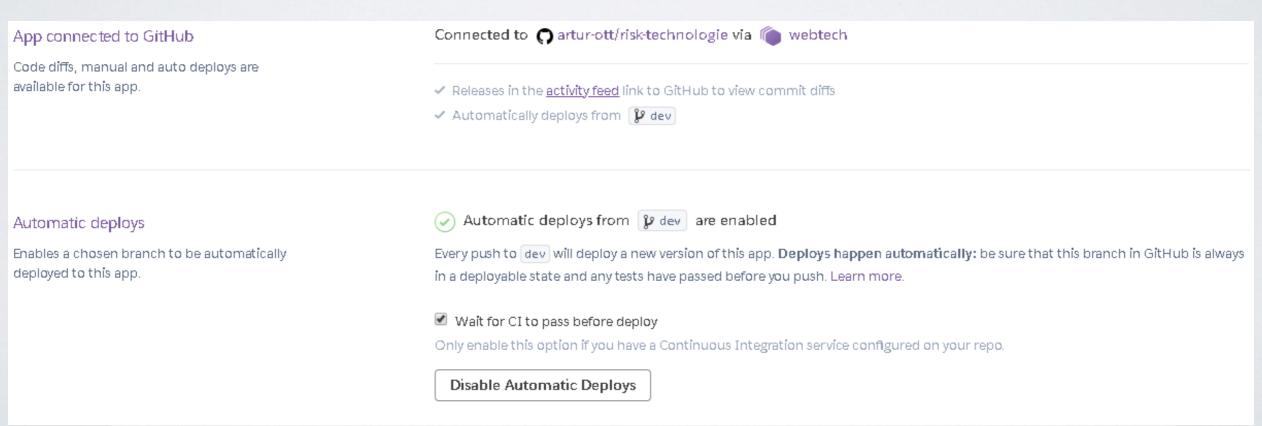
3

AUTHENTIFICATION

```
# Google provider
google.authorizationURL="https://accounts.google.com/o/oauth2/auth"
google.accessTokenURL="https://accounts.google.com/o/oauth2/token"
google.redirectURL="http://localhost:9000/authenticate/google"
google.redirectURL=${?GOOGLE REDIRECT URL}
google.clientID=
google.clientID=${?GOOGLE CLIENT ID}
google.clientSecret=
google.clientSecret=${?GOOGLE CLIENT SECRET}
google.scope="profile email"
# Twitter provider
twitter.requestTokenURL="https://twitter.com/oauth/request token"
twitter.accessTokenURL="https://twitter.com/oauth/access token"
twitter.authorizationURL="https://twitter.com/oauth/authenticate"
twitter.callbackURL="http://localhost:9000/authenticate/twitter"
twitter.callbackURL=${?TWITTER REDIRECT URL}
twitter.consumerKey=
twitter.consumerKey=${?TWITTER CONSUMER KEY}
twitter.consumerSecret=
twitter.consumerSecret=${?TWITTER CONSUMER SECRET}
```

DEPLOYMENT



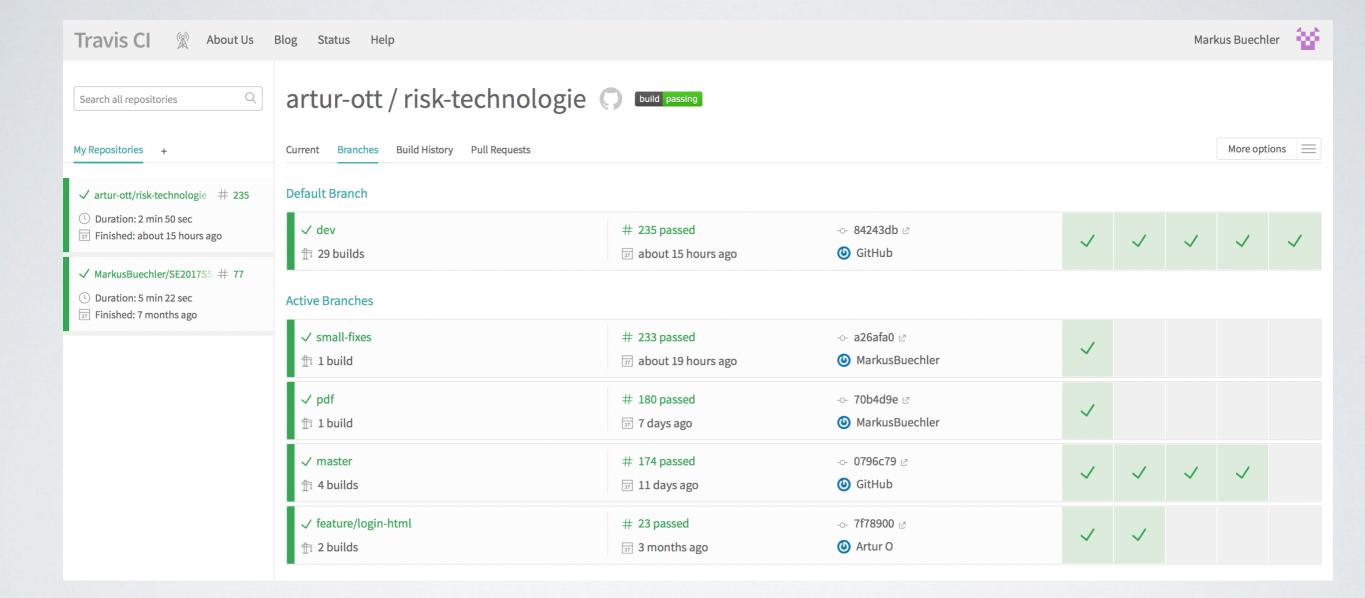


PULL REQUESTS

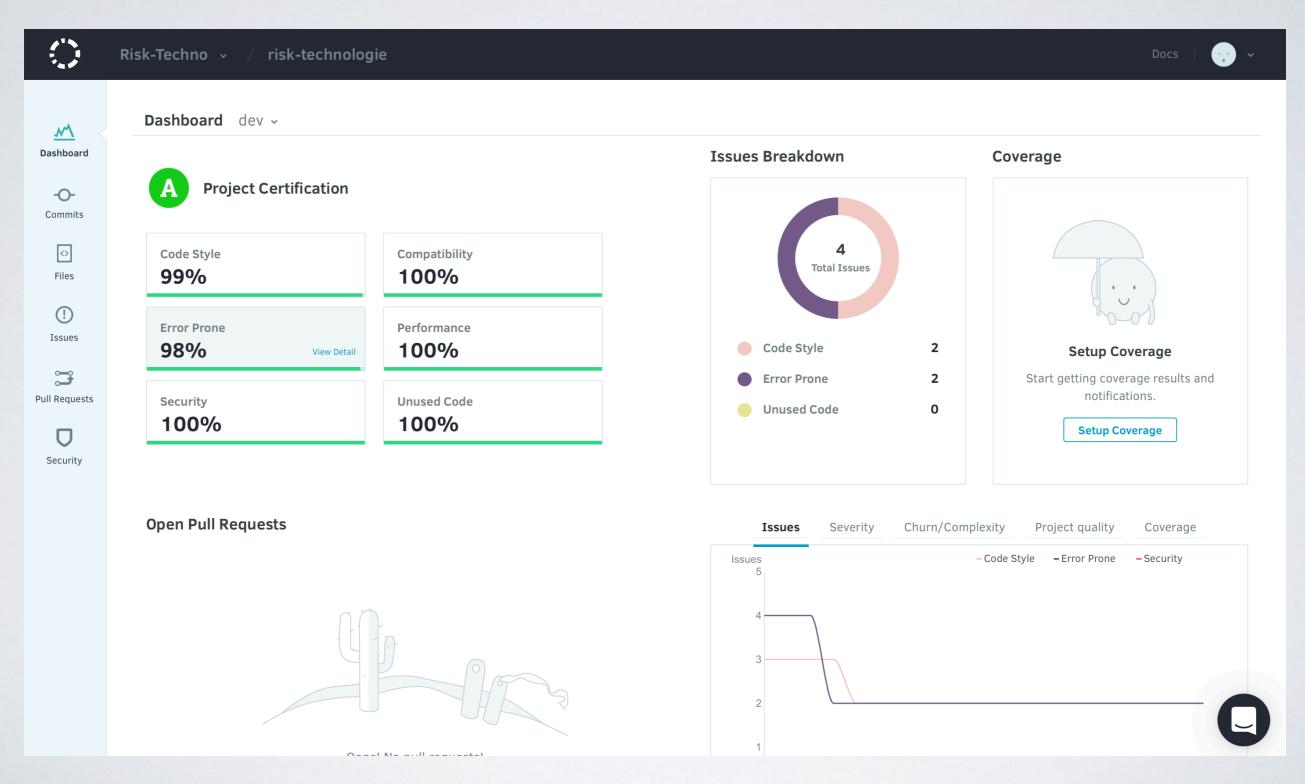
X Clear current search query, filters, and sorts ↑ 0 Open ✓ 38 Closed Author ▼ Labels ▼ Projects ▼ Milestones ▼ Reviews ▼ Assignee ▼ Sort ▼ Small fixes \Box 1 #38 by MarkusBuechler was merged 15 hours ago • Approved heroku urls changed to wss

✓ #37 by artur-ott was merged a day ago • Approved □ 1 #36 by artur-ott was merged a day ago • Approved #35 by artur-ott was merged a day ago • Approved websocket url is set as config #34 by artur-ott was merged a day ago • Approved google and twitter redirect added #33 by artur-ott was merged a day ago • Approved **5** #32 by artur-ott was merged a day ago • Approved

TRAVIS CI



CODACY



SLACK

