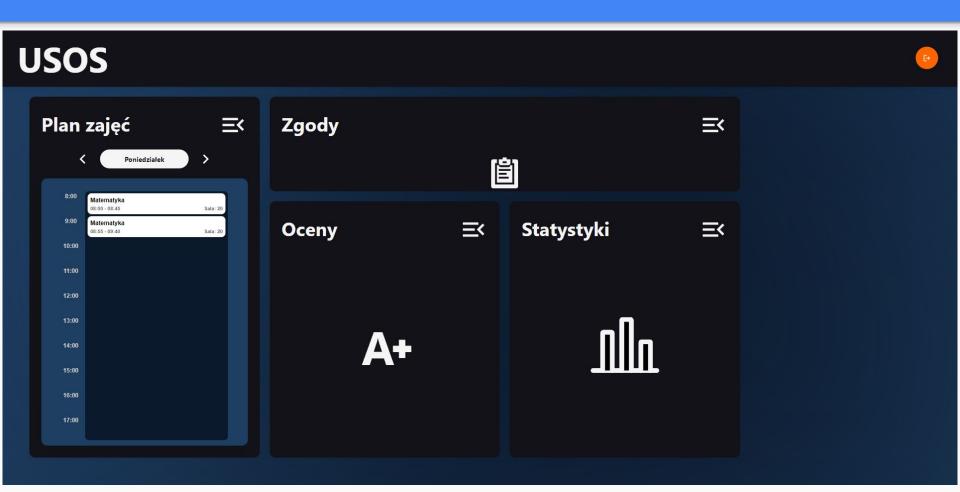
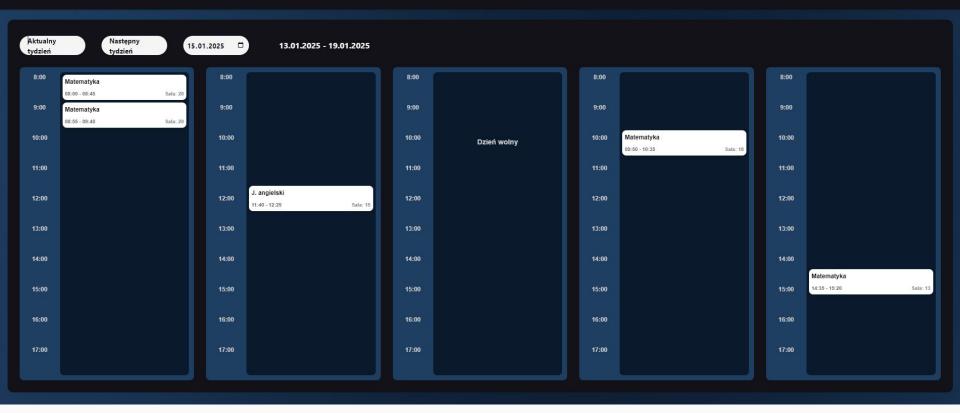


Interfejs użytkownika, UI/UX, Podsumowanie projektu

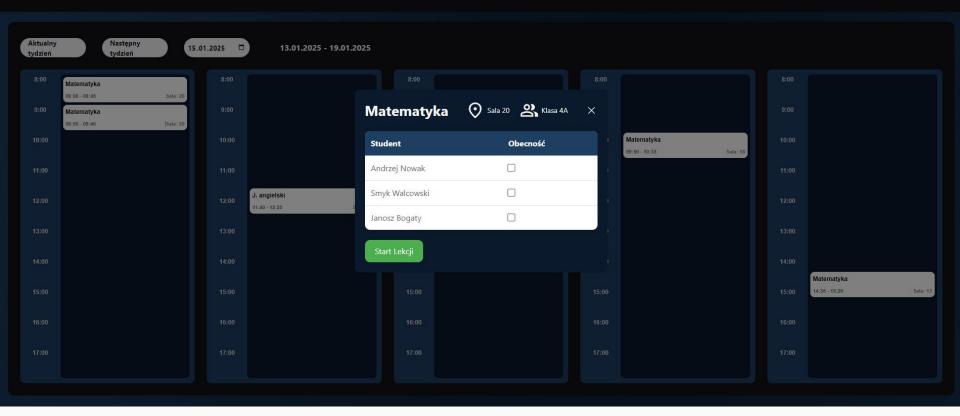
Nauczyciel - główny widok





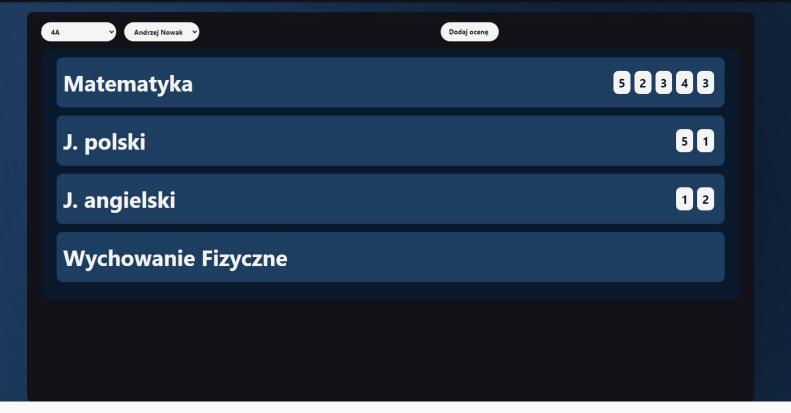






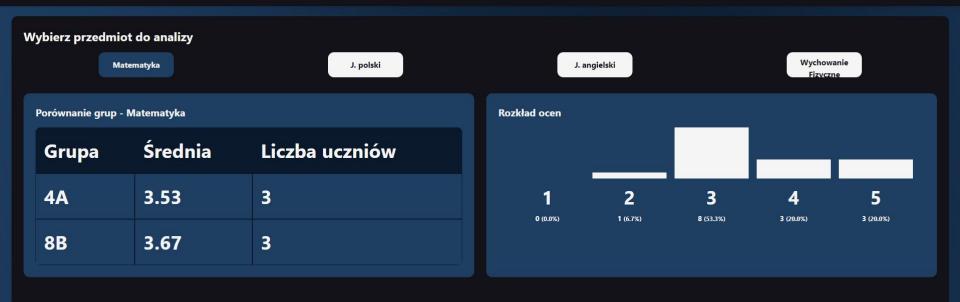
Nauczyciel - Wyświetlanie ocen



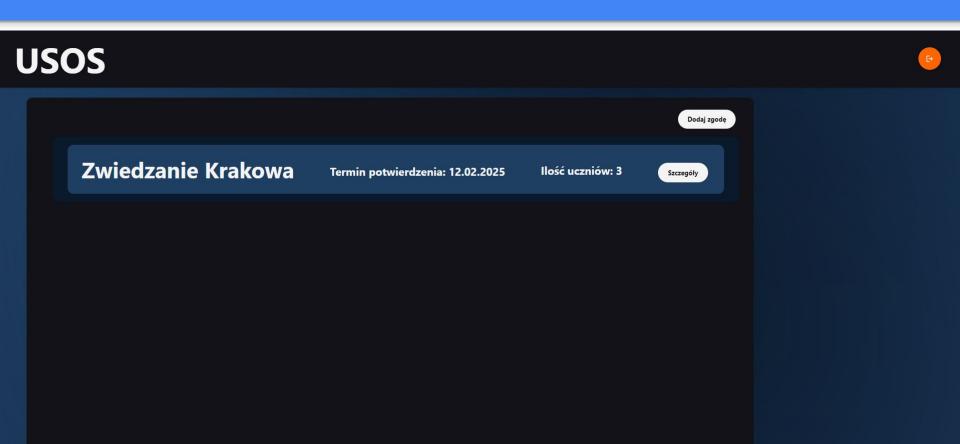


Statystyki u nauczyciela



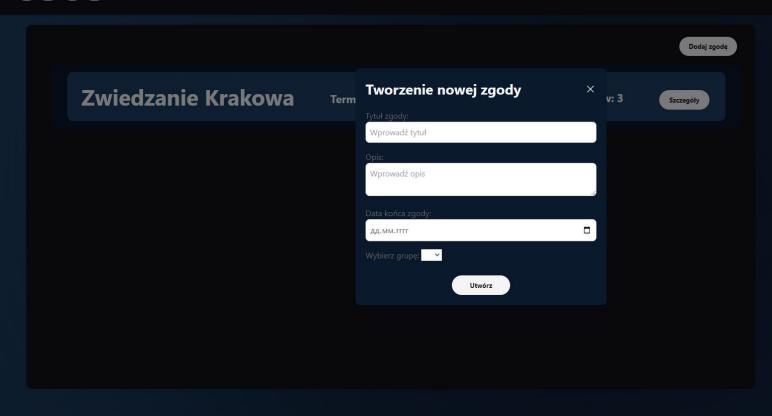


Nauczyciel - Wyświetlanie utworzonych zgód

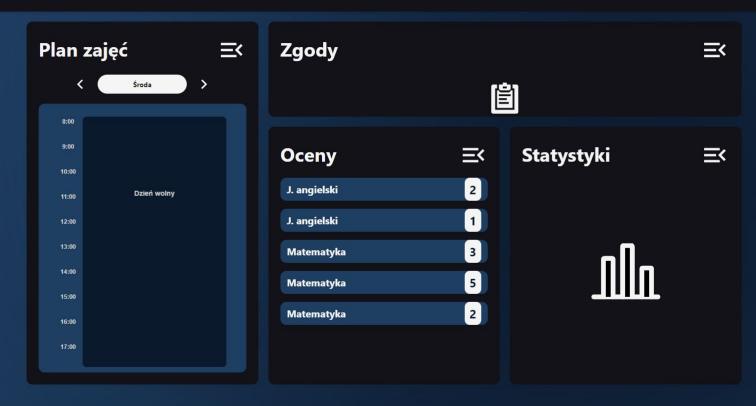


Nauczyciel - Tworzenie zgody elektronicznej



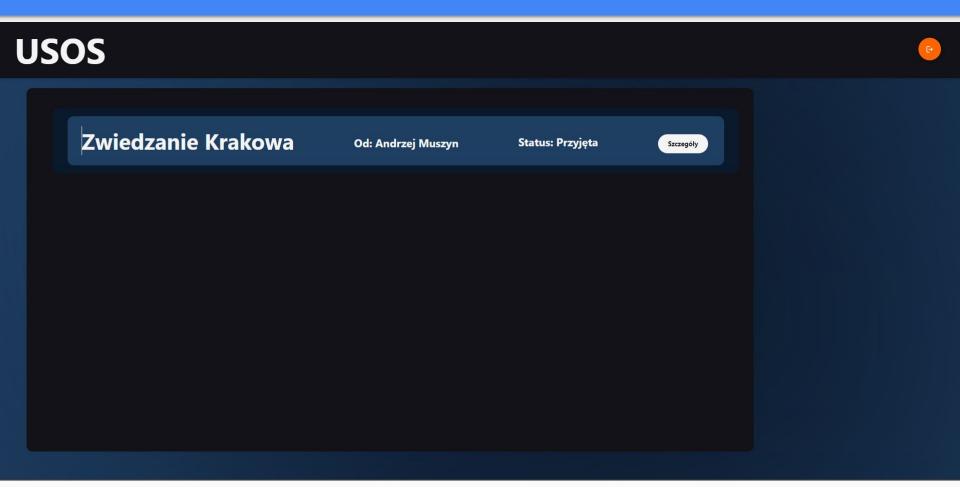


Rodzic - Widok główny

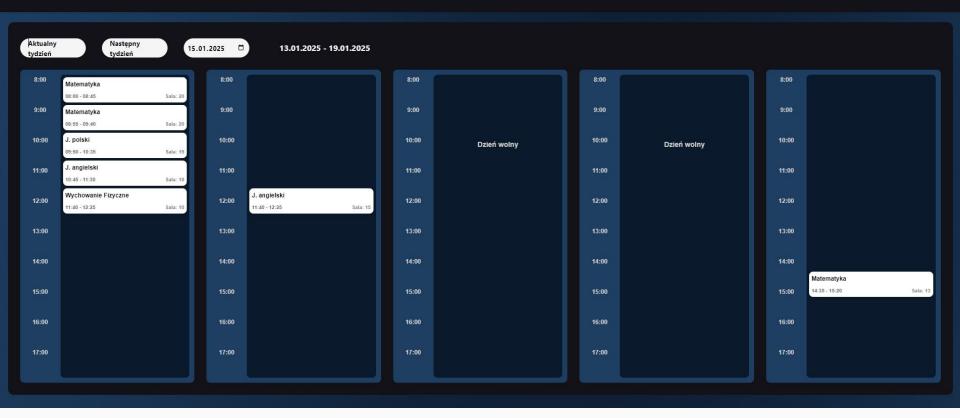




Rodzic - Wyświetlanie zgód







Przykładowy kod po stronie UI - fillLastGrades

```
async fillLastGrades(userId: number) {
 this.lastGrades = [];
 try {
   const subjectsMap = await this.userService.getAllUsersSubjects(userId);
   const allGrades: { name: string, grade: number, date: Date }[] = [];
   for (const [groupId, subjects] of subjectsMap.entries()) {
     for (const subject of subjects) {
       try {
         const grades = await this.userService.getUsersGradesFromSubject(userId, subject.id);
         grades.forEach(grade => {
           allGrades.push({
             name: subject.subjectName,
             grade: this.userService.parseGradeValue(grade.value),
             date: grade.timestamp
         catch (error) {
         console.error(`Bład podczas ładowania ocen dla przedmiotu ${subject.subjectName} (grupa ${groupId}):`, error);
   const sortedGrades = allGrades.sort((a, b) => b.date.getTime() - a.date.getTime());
   this.lastGrades = sortedGrades.slice(0, 5);
   catch (error) {
   console.error('Błąd podczas ładowania ostatnich ocen:', error);
```

Przykładowy kod po stronie UI - fillEvents

```
async fillEvents() {
 try {
   const schedule = await this.userService.getUserSchedule();
   console.log(schedule);
   const scheduleSlots = [
     { slot: 1, start: "08:00", end: "08:45", top: "5px", height: "50px" },
     { slot: 2, start: "08:55", end: "09:40", top: "60px", height: "50px" },
     { slot: 3, start: "09:50", end: "10:35", top: "115px", height: "50px" },
     { slot: 4, start: "10:45", end: "11:30", top: "170px", height: "50px" },
     { slot: 5, start: "11:40", end: "12:25", top: "225px", height: "50px" },
     { slot: 6, start: "12:45", end: "13:30", top: "280px", height: "50px" },
     { slot: 7, start: "13:40", end: "14:25", top: "335px", height: "50px" },
     { slot: 8, start: "14:35", end: "15:20", top: "390px", height: "50px" },
   this.weekEvents = { 1: [], 2: [], 3: [], 4: [], 5: [] };
   schedule.forEach((event) => {
     const slotInfo = scheduleSlots.find((slot) => slot.slot === event.slot);
     if (slotInfo) {
       this.weekEvents[event.dayOfWeek].push({
         eventInfo: event,
         time: ${slotInfo.start} - ${slotInfo.end}`,
         start: slotInfo.start,
         end: slotInfo.end,
         top: slotInfo.top,
         height: slotInfo.height
   catch (error)
   console.error("Błąd przy ładowaniu planu zajęć", error);
```

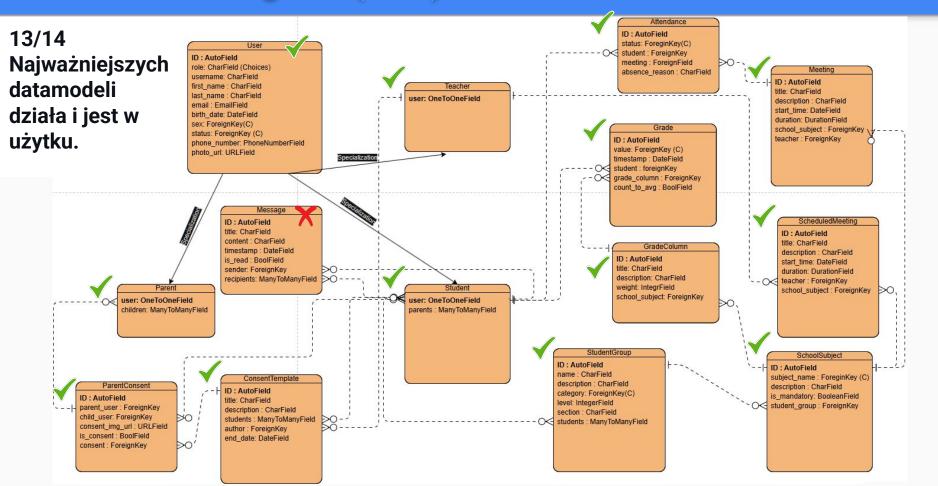
Przykładowy kod po stronie UI - getAllUsersSubjects

```
async getAllUsersSubjects(userId: number): Promise<Map<number, Array<SchoolSubject>>> {
 const url = `${this.userUrl}/${userId}/student/groups`;
 const userGroups = await this.getAllUserGroupIds(userId);
 const subjects = new Map<number, Array<SchoolSubject>>();
 for (const groupId of userGroups) {
   try {
     const response = await lastValueFrom(this.http.get<getSubjectResponse[]>(`${url}/${groupId}/subjects`, { withCredentials: true }));
     const tempSubjects = response.map(element => SchoolSubject.fromApiResponse(element));
     subjects.set(groupId, tempSubjects);
     catch (error) {
     console.error(`Bled ladowania danych groupId ${groupId}:`, error);
 return subjects;
```

Business value canvas



Data model diagram (ERD)



Testy

```
PS C:\Users\kryspin\Documents\06 repos\USOS IO\backend> py manage.py test --parallel 4
Found 92 test(s).
Creating test database for alias 'default'...
Cloning test database for alias 'default'...
System check identified no issues (0 silenced).
Ran 92 tests in 20.479s
OK
Destroying test database for alias 'default'...
```

Destroying test database for alias 'default'...

PS C:\Users\kryspin\Documents\06_repos\USOS_IO\backend>

Przykładowe unittesty

```
V OUTLINE
                             class ElectronicConsentTests(APITestCase):
 > & MeetingTests
 > ધ UserEndpointTests
                                  def setUp(self): ...
 > 4 StudentEndpointTests
 > <a> TeacherEndpointTests</a>
                                  def test get pending consents(self):
 > S ParentEndpointTests
                                      url = reverse('pending consents')
 > GradeEndpointTests
                                      response = self.client.get(url)
 > ScheduledMeetingEndpointTests
                                      self.assertEqual(response.status code, status.HTTP 200 OK)
 > 🕏 AttendanceEndpointTests
                                      self.assertIn('parent submission', response.data[0])
 > 😭 ParentConsentEndpointTests
                                      self.assertIsNone(response.data[0]['parent submission'])
 > 4 ConsentTemplateEndpointTests
 > StudentGroupEndpointTests
                                  def test get pending consents with submission(self):
 > SchoolSubjectEndpointTests
                                      ParentConsent.objects.create(
 > 4 MeetingEndpointTests
                                           parent_user=self.parent, child_user=self.student, consent=self.consent_template, is_consent=True)
 > 
MessageEndpointTests
                                      url = reverse('pending consents')
 > GradeColumnEndpointTests
                                      response = self.client.get(url)
 > userViewSetTests
                                      self.assertEqual(response.status code, status.HTTP 200 OK)
 > GradeListCreateViewTests
                                      self.assertIn('parent submission', response.data[0])
 > ScheduledMeetingViewTests
                                      self.assertTrue(response.data[0]['parent_submission'])
 > & ParentChildrenViewTests
 > de ElectronicConsentTests
                                  def test get parent consent detail(self):
 > & ConsentTemplateModelTests
                                      parent consent = ParentConsent.objects.create(
 > de StudentGroupsAPITests
                                           parent_user=self.parent, child_user=self.student, consent=self.consent_template, is_consent=True)
 > GetScheduledMeetingsTests
                                      url = reverse('parent_consent_detail', args=[parent_consent.id])
 > & PermissionTests
                                      response = self.client.get(url)
                                      self.assertEqual(response.status_code, status.HTTP_200_OK)
 > ConsentTemplateAPITests
                                      self.assertEqual(response.data['id'], parent consent.id)
 > & ParentConsentAPITests
```

Przykładowe unittesty

```
def test create parent consent(self):
                                                                                      def test parent cannot create consent template(self):
    url = reverse('parent consent submit', args=[self.consent template.id])
                                                                                          url = reverse('consent template list')
                                                                                          data = {
    data = {
                                                                                              'title': 'New Consent',
         'child user': self.student.user id,
                                                                                              'description': 'New Description',
                                                                                              'end date': (timezone.now().date() + timedelta(days=10)).isoformat(),
                                                                                              'students': [self.student.user id]
    response = self.client.post(url, data, format='multipart')
    self.assertEqual(response.status code, status.HTTP 201 CREATED)
                                                                                          response = self.client.post(url, data, format='json')
    self.assertEqual(ParentConsent.objects.count(), 1)
                                                                                          self.assertEqual(response.status code, status.HTTP 403 FORBIDDEN)
    self.assertEqual(ParentConsent.objects.get().is_consent, True)
                                                                                      def test student cannot create consent template(self):
                                                                                          self.client.login(username='student test', password='testpass')
def test get consent templates(self):
                                                                                          url = reverse('consent_template_list')
    self.client.login(username='teacher test', password='testpass')
                                                                                          data = {
    url = reverse('consent template list')
                                                                                              'title': 'New Consent',
    response = self.client.get(url)
                                                                                              'description': 'New Description',
    self.assertEqual(response.status_code, status.HTTP_200_OK)
                                                                                              'end date': (timezone.now().date() + timedelta(days=10)).isoformat(),
                                                                                              'students': [self.student.user id]
def test_get_consent_template_detail_teacher(self):
    self.client.login(username='teacher_test', password='testpass')
                                                                                          response = self.client.post(url, data, format='json')
                                                                                          self.assertEqual(response.status code, status.HTTP 403 FORBIDDEN)
    url = reverse('consent template detail',
                   args=[self.consent template.id])
                                                                                      def test teacher can create consent template(self):
    response = self.client.get(url)
                                                                                          self.client.login(username='teacher test', password='testpass')
    self.assertEqual(response.status code, status.HTTP 200 OK)
                                                                                          url = reverse('consent template list')
    self.assertIn('parent_consents', response.data)
                                                                                          data = {
                                                                                              'title': 'New Consent',
def test_get_consent_template_detail_parent(self):
                                                                                              'description': 'New Description',
    url = reverse('consent_template_detail',
                                                                                              'end_date': (timezone.now().date() + timedelta(days=10)).isoformat(),
                   args=[self.consent template.id])
                                                                                              'students': [self.student.user id]
    response = self.client.get(url)
                                                                                          response = self.client.post(url, data, format='json')
    self.assertEqual(response.status code, status.HTTP 200 OK)
                                                                                          self.assertEqual(response.status code, status.HTTP 201 CREATED)
    self.assertNotIn('parent consents', response.data)
                                                                                          self.assertEqual(ConsentTemplate.objects.count(), 2)
```

Wzorce projektowe: Factory

```
class UserManager(BaseUserManager):
    def create user(self, username, email, password=None, **extra fields):
        if not email:
            raise ValueError('The Email field must be set')
        email = self.normalize email(email)
        user = self.model(username=username, email=email, **extra fields)
        user.set password(password)
        user.save(using=self. db)
        return user
    def create superuser(self, username, email, password=None, **extra fields):
        extra fields.setdefault('is staff', True)
        extra fields.setdefault('is superuser', True)
        return self.create user(username, email, password, **extra fields)
```

