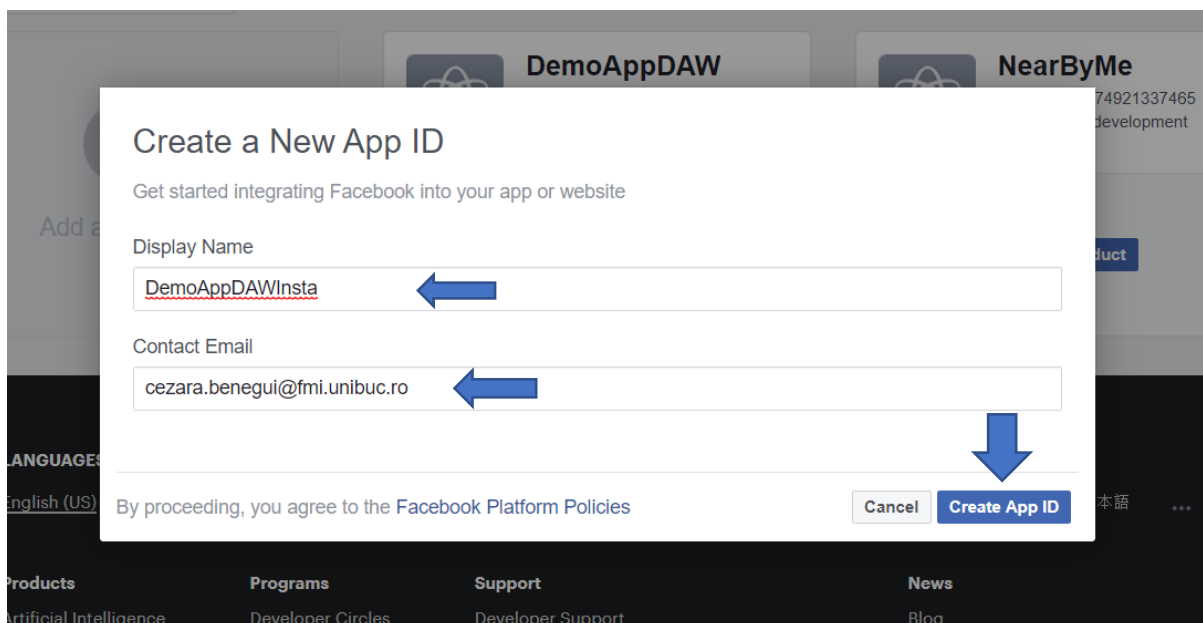
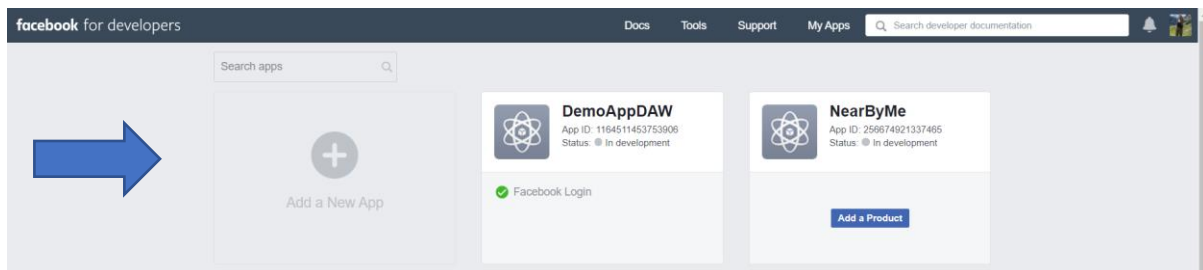


Consumarea API-ului Instagram. Hostare aplicatie.

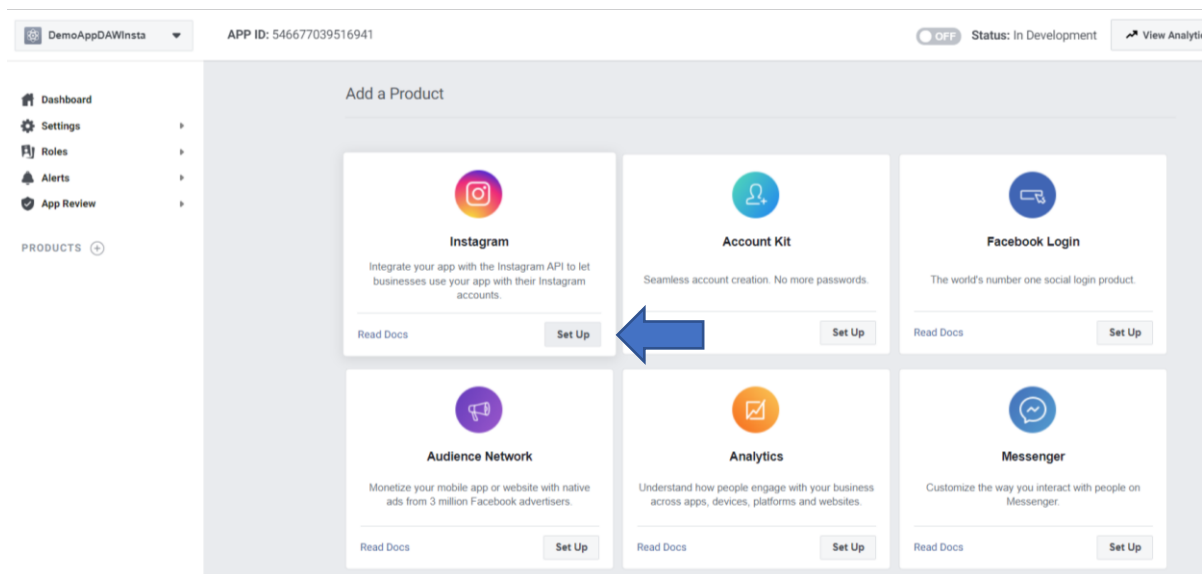
Consumarea API-ului Instagram

Pentru a putea consuma API-ul Instagram sunt necesari urmatoorii pasi:

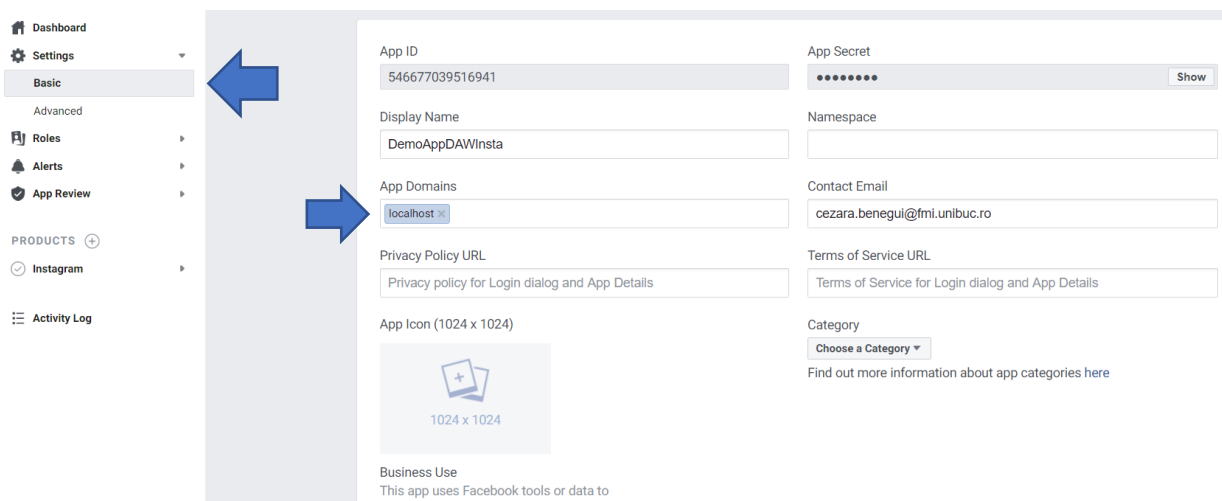
Pasul 1 – se acceseaza <https://developers.facebook.com/apps/> si se adauga o noua aplicatie (My Apps)



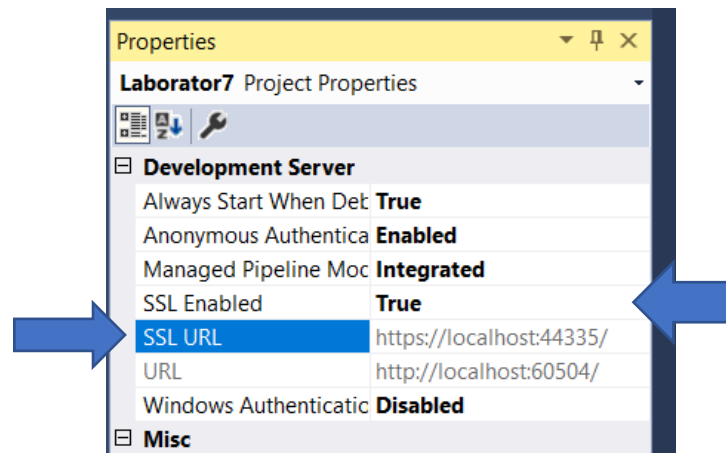
Pasul 2 – Se adauga optiunea “Instagram” in aplicatia nou creata:



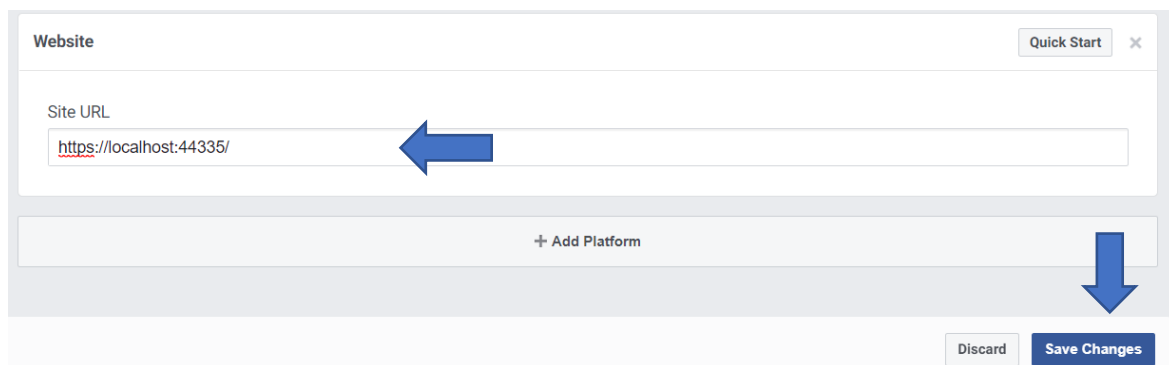
Pasul 3 – se configureaza detaliile de baza ale aplicatiei folosind meniul din partea stanga: **Settings -> Basic**



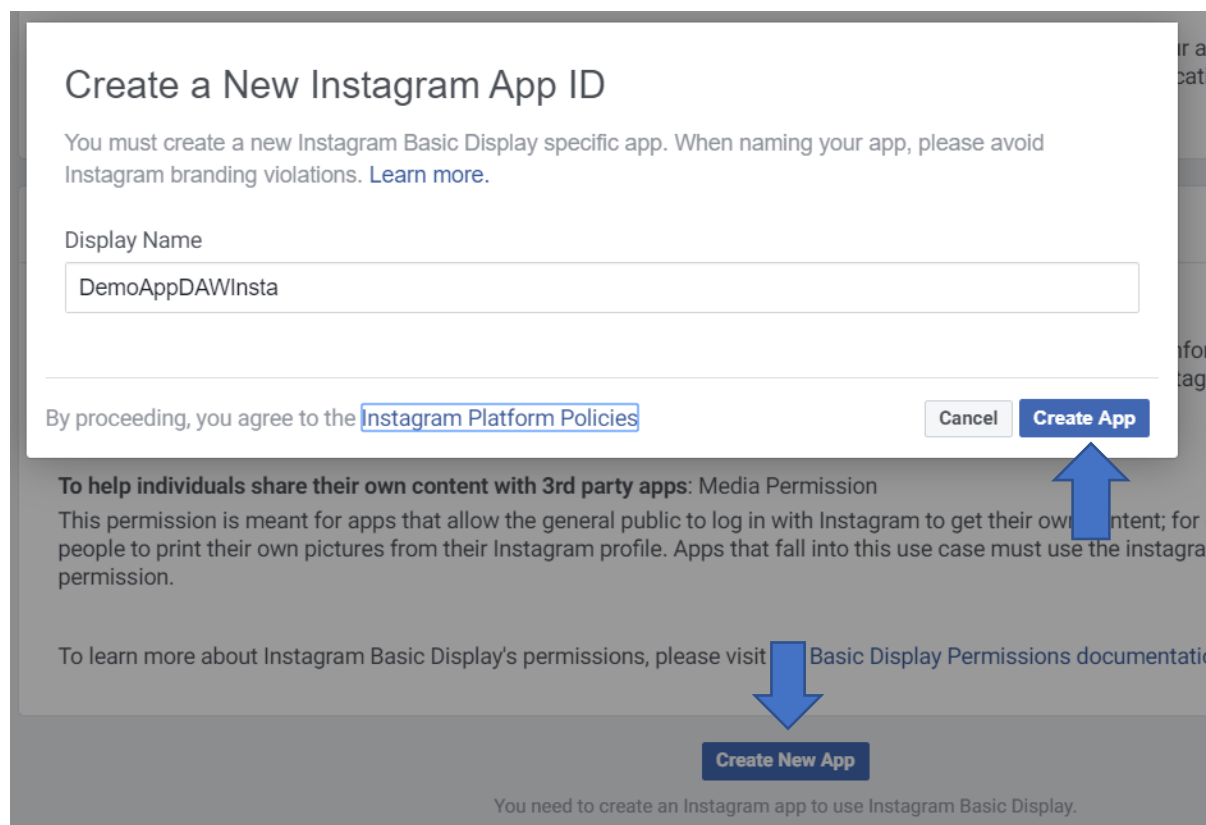
Atentie: pentru a prelua URL-ul cu SSL (HTTPS) in Visual Studio se acceseaza panoul de proprietati al proiectului si se bifeaza **SSL Enabled -> True**



In partea de jos a paginii se face click pe butonul “**Add platform**” si se selecteaza optiunea “**Website**”. In casuta nou aparuta se completeaza URL-ul aplicatiei. Dupa completare se apasa butonul “**Save changes**”



Pasul 4 – din meniul lateral se selecteaza **Products -> Instagram-> Basic display**. In partea de jos a paginii se face click pe butonul **Create New App** deoarece este necesara crearea unui ID pentru aplicatia de Instagram.



The screenshot shows the 'Create a New Instagram App ID' form. At the top, it says 'Create a New Instagram App ID' and 'You must create a new Instagram Basic Display specific app. When naming your app, please avoid Instagram branding violations. [Learn more.](#)'. Below this is a 'Display Name' field containing 'DemoAppDAWInsta'. At the bottom of the form, it says 'By proceeding, you agree to the [Instagram Platform Policies](#)' with 'Cancel' and 'Create App' buttons. A blue arrow points up to the 'Create App' button. Below the form, there is a section titled 'To help individuals share their own content with 3rd party apps: Media Permission' with explanatory text. Another blue arrow points down from this section to a 'Create New App' button at the bottom of the page. At the very bottom, a message states 'You need to create an Instagram app to use Instagram Basic Display.'

Create a New Instagram App ID

You must create a new Instagram Basic Display specific app. When naming your app, please avoid Instagram branding violations. [Learn more.](#)

Display Name

DemoAppDAWInsta

By proceeding, you agree to the [Instagram Platform Policies](#) Cancel Create App

To help individuals share their own content with 3rd party apps: Media Permission

This permission is meant for apps that allow the general public to log in with Instagram to get their own content; for people to print their own pictures from their Instagram profile. Apps that fall into this use case must use the Instagram permission.

To learn more about Instagram Basic Display's permissions, please visit [Basic Display Permissions documentation](#)

Create New App

You need to create an Instagram app to use Instagram Basic Display.

Pasul 5 – Se configureaza URL-urile de callback ale aplicatiei de Instagram dupa cum urmeaza:

Client OAuth Settings

Valid OAuth Redirect URIs

Deauthorize

Deauthorize Callback URL

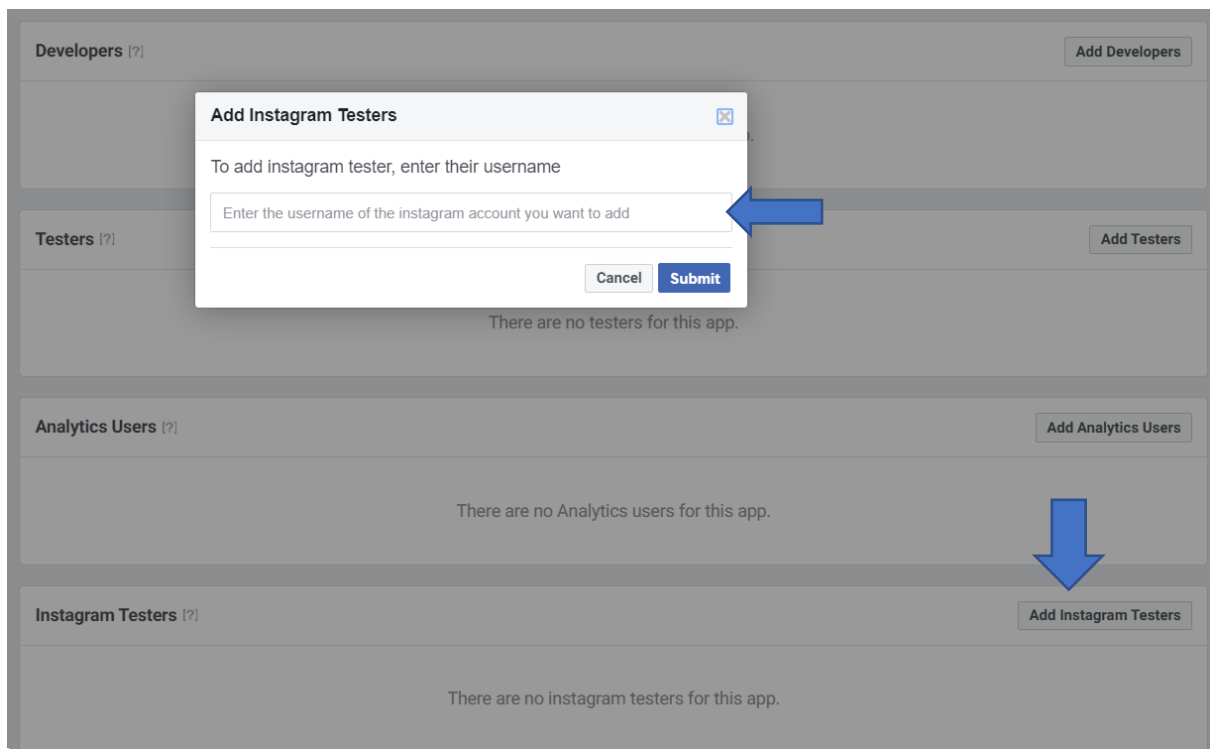
Data Deletion Requests

Data Deletion Request URL

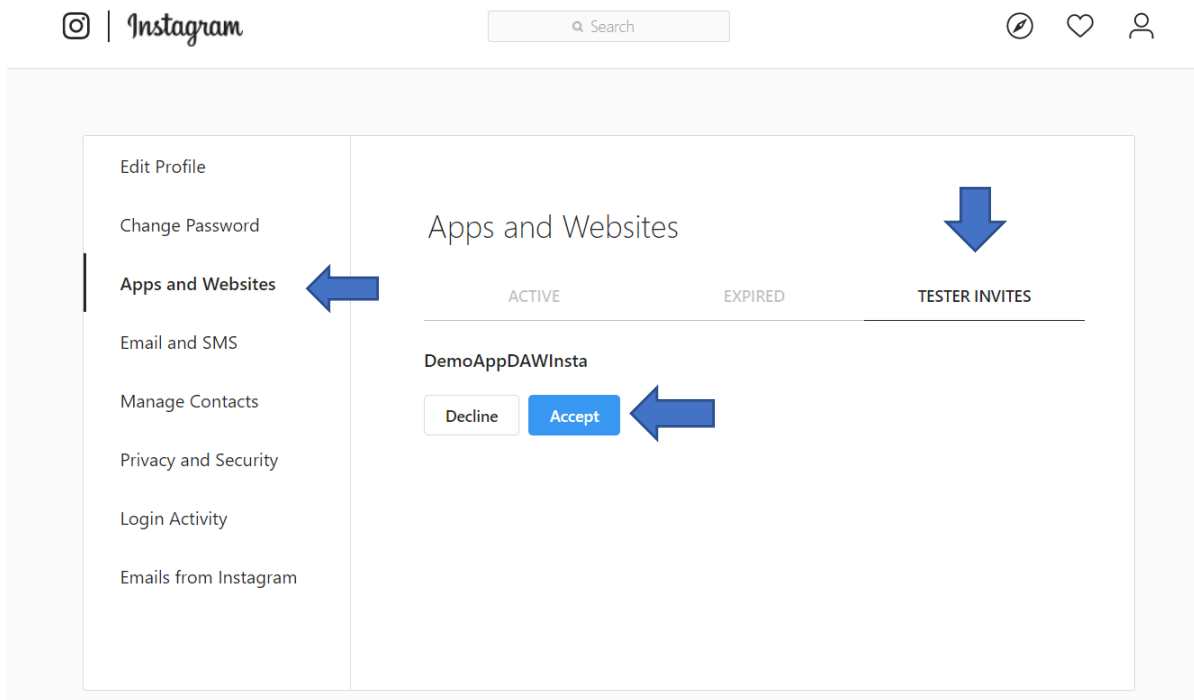
App Review for Instagram Basic Display

Discard Save Changes

Pasul 6 – Se adauga conturile de Instagram care pot accesa aplicatia in Development Mode. Din meniul lateral se acceseaza **Roles -> Roles -> Add Instagram Testers** si se adauga conturile dorite.



Utilizatorii care au fost invitati pentru testare trebuie sa acceseze urmatorul URL https://www.instagram.com/accounts/manage_access/ si sa accepte invitatia primita.



Pasul 7 – Administratorul platformei va avea dreptul sa se autentifice cu contul de Instagram al aplicatiei pentru a putea afisa informatiile relevante intr-o anumita pagina din platforma. Administratorul fiind singurul care poate configura aceste componente, ne vom asigura ca doar acesta are acces si poate realiza autentificarea folosind Instagram. Astfel, in aplicatie, vom adauga o noua pagina vizibila pentru administrator care va contine butonul de autentificare cu Instagram.

Se adauga un nou Controller:

```
public class InstagramController : Controller
{
    // Va afisa butonul de autentificare cu instagram
    [Authorize(Roles = "Administrator")]
    public ActionResult Index()
    {
        return View();
    }

    // Va captura token-ul de la Instagram
    [Authorize(Roles = "Administrator")]
    public ActionResult InstagramRedirect()
    {
        return View();
    }
}
```

Este necesara adaugarea unei rute in fisierul **RouteConfig.cs** deoarece in aplicatia de Instagram a fost specificat URL-ul de callback (redirectionarea dupa autentificarea cu Instagram) sa ajunga pe ruta **/InstagramRedirect** (Products -> Instagram -> Basic Display -> Client oAuth Settings).

```
routes.MapRoute(  
    name: "InstagramRedirect",  
    url: "InstagramRedirect",  
    defaults: new { controller = "Instagram", action =  
        "InstagramRedirect"}  
);
```

Se adauga pagina cu butonul de autentificare in folderul **Views -> Instagram -> Index.cshtml**

```
<h2>Autentificare cu Instagram</h2>
```

```
@if (ViewBag.HasToken)
```

```
{
```

```
    <p>Autentificat cu Instagram</p>
```

```
} else
```

```
{
```

```
    <p>Click pe butonul de mai jos pentru autentificare</p>
```

```
}
```

```
<a
```

```
href="https://api.instagram.com/oauth/authorize?app_id=482848862342501&redirect_uri=https://localhost:44335/InstagramRedirect&scope=user_profile,user_media&response_type=code" class="btn btn-success"><i class="glyphicon glyphicon-log-in"></i> Autentificare cu instagram</a>
```

Butonul va face un Redirect catre aplicatia de Instagram si va trimite urmatoorii parametrii:

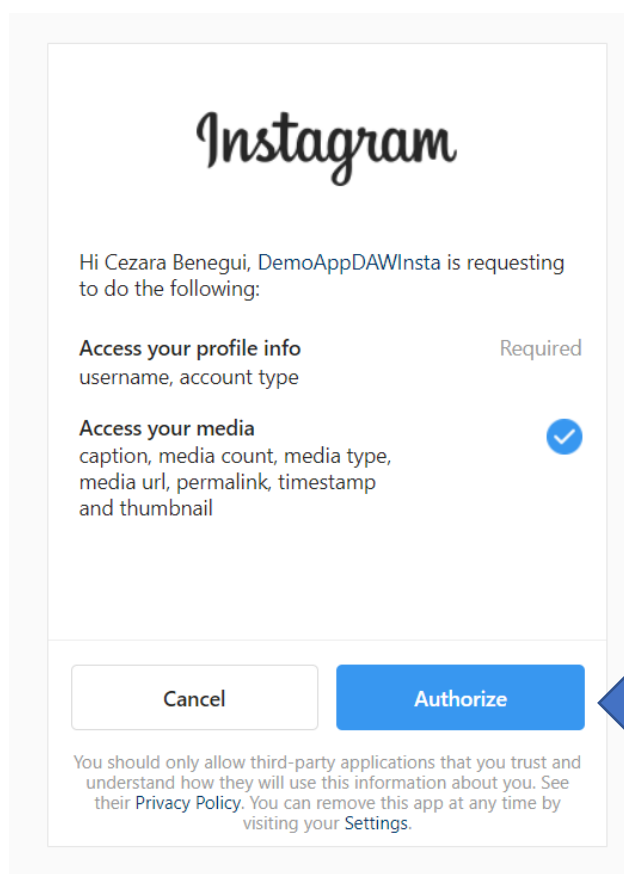
- App_id – Se preia din in Products -> Instagram -> Basic Display -> Instagram App ID
- Redirect_uri – Este acelasi URL configurat in Products -> Instagram -> Basic Display -> Client oAuth Settings
- Scope – reprezinta permisiunile pe care utilizatorul le ofera asupra contului sau.
- Response_type – reprezinta tipul de raspuns pe care aplicatia il va intoarce in urma autentificarii.

Procesul de autentificare:

ARTICLES APP Afisare articole Afisare categorii Afisare utilizatori Adaugare articol Hello admin@admin.com! Log off

Autentificare cu Instagram

➔ Autentificare cu Instagram



ARTICLES APP Afisare articole Afisare categorii Afisare utilizatori Adaugare articol Hello admin@admin.com! Log off

Autentificare cu Instagram

Autentificat cu Instagram

➔ Autentificare cu Instagram

Controller-ul pentru autentificarea cu Instagram are urmatorul cod:

```
public class InstagramController : Controller
{
    // Va afisa butonul de autentificare cu instagram
    [Authorize(Roles = "Administrator")]

    public ActionResult Index()
    {
        string token =
            System.Configuration.ConfigurationManager.AppSettings["IgAccess
            Token"].ToString();
        ViewBag.hasToken = (token != "");

        return View();
    }

    // Se primeste codul de acces si se schimba cu token-ul de la
    Instagram
    [Authorize(Roles = "Administrator")]
    public async System.Threading.Tasks.Task<ActionResult>
    InstagramRedirect()
    {
        // Se primeste codul de autentificare de la Instagram
        string code = Request.Params.Get("code").ToString();

        // Se face un client HTTP pentru a obtine token-ul de acces de
        la instagram
        var apiUrl = new
        Uri("https://api.instagram.com/oauth/access_token");
        var client = new HttpClient();

        // Se seteaza continutul request-ului
        var postContent = new Dictionary<string, string>
        {
            { "app_id", "482848862342501" },
            { "app_secret", "43a83222f745bdce13ff30759c9eca85" },
            { "grant_type", "authorization_code" },
            { "redirect_uri",
            "https://localhost:44335/InstagramRedirect" },
            { "code", code }
        };
        var encodedContent = new FormUrlEncodedContent(postContent);

        // Se trimite un request de tip POST la API
        var response = await client.PostAsync(apiUrl, encodedContent);

        // Se primeste raspunsul de la API
        string content = await response.Content.ReadAsStringAsync();

        // Se transforma JSON-ul primit intr-un dictionar
        var values = JsonConvert.DeserializeObject<Dictionary<string,
        string>>(content);
```

```

        // Se salveaza token-ul primit
System.Configuration.ConfigurationManager.AppSettings.Set("IgAccessToken",
values["access_token"]);

        // Se salveaza ID-ul utilizatorului autentificat cu instagram

System.Configuration.ConfigurationManager.AppSettings.Set("IgUserId",
values["user_id"]);

        // Se redirectioneaza catre actiunea Index
return RedirectToAction("Index");
    }
}

```

In fisierul **Web.config**, in sectiunea appSettings se adauga urmatoarele doua chei:

```

<appSettings>

    <add key="webpages:Version" value="3.0.0.0" />
    <add key="webpages:Enabled" value="false" />
    <add key="ClientValidationEnabled" value="true" />
    <add key="UnobtrusiveJavaScriptEnabled" value="true" />

    <add key="IgAccessToken" value="" />
    <add key="IgUserId" value="" />

</appSettings>

```



- Metoda Index – aceasta metoda verifica daca in WebConfig in sectiunea AppSettings exista o valoare pentru InstagramToken. InstagramToken este codul primit in urma autentificarii si este folosit pentru a apela mai departe metodele API-ului Instagram.
- Metoda InstagramRedirect – aceasta metoda este callback-ul (URL-ul la care Instagram trimite token-ul de autentificare) care va salva si transforma codul primit, intr-un token, printr-un request de tip POST catre API-ul Instagram. Token-ul primit si ID-ul utilizatorului vor fi salvate in WebConfig. In urma salvarii codului, aceasta metoda redirectioneaza catre Index.

Pasul 8 - Afisarea feed-ului de Instagram:

Se va adauga o noua metoda in Controller

```
// Va afisa feed-ul de instagram
public async System.Threading.Tasks.Task<ActionResult> Feed()
{
    // Se creeaza o lista generala de imagini care va fi pasata
    la view
    var imagesList = new List<string>();

    // Se incarca token si user ID din Web.config
    string token =
System.Configuration.ConfigurationManager.AppSettings["IgAccessToken"].ToString();
    string user_id =
System.Configuration.ConfigurationManager.AppSettings["IgUserId"].ToString();

    // Se preiau pozele profilului din API
    var apiUrl = new Uri(" https://graph.instagram.com/" + user_id
+ "/media?access_token=" + token);
    var client = new HttpClient();
    client.Timeout = TimeSpan.FromMinutes(10);
    var response = await client.GetAsync(apiUrl);

    // Se primeste raspunsul de la API
    string content = await response.Content.ReadAsStringAsync();

    // Se transforma JSON-ul primit intr-un dictionar
    var values = JsonConvert.DeserializeObject<Dictionary<string,
object>>(content);

    // Se parcurge lista de imagini si se descarca
    foreach(var image in (dynamic)values["data"])
    {
        var _apiUrl = new Uri(" https://graph.instagram.com/" +
image.id + "?fields=media_url&access_token=" + token);
        var _client = new HttpClient();
        var _response = await _client.GetAsync(_apiUrl);

        // Se primeste raspunsul de la API
        string _content = await
_response.Content.ReadAsStringAsync();

        // Se transforma JSON-ul primit intr-un dictionar
        var _values =
JsonConvert.DeserializeObject<Dictionary<string, string>>(_content);
        imagesList.Add(_values["media_url"]);
    }
}
```

```

        // Se paseaza datele de la API catre View
        ViewBag.images = imagesList;

        return View();
    }

```

Se va adauga un nou view (Views -> Instagram -> Feed.cshtml)

```

<h2>Instagram Feed</h2>

<div class="row">
    @foreach (var image in ViewBag.images)
    {
        <div class="col-xs-3">
            
        </div>
    }
</div>

```

Se porneste aplicatia si se face autentificarea cu Instagram. Dupa autentificare se va accesa URL-ul **/Instagram/Feed**. In acest View se vor afisa imaginile de pe profilul utilizatorului care a fost autentificat.

Documentatia:

<https://developers.facebook.com/docs/instagram-basic-display-api/getting-started>

Hostare aplicatie

<https://docs.microsoft.com/en-us/azure/app-service/app-service-web-tutorial-dotnet-sqldatabase>