НАЦІОНАЛЬНИЙ ТЕХНІЧНИЙ УНІВЕРСИТЕТ УКРАЇНИ "КИЇВСЬКИЙ ПОЛІТЕХНІЧНИЙ ІНСТИТУТ ІМЕНІ ІГОРЯ СІКОРСЬКОГО"

Факультет інформатики та обчислювальної техніки Кафедра обчислювальної техніки

Лабораторна робота №4 з дисципліни

"Програмування мобільних систем / Розроблення клієнтських додатків для мобільних платформ"

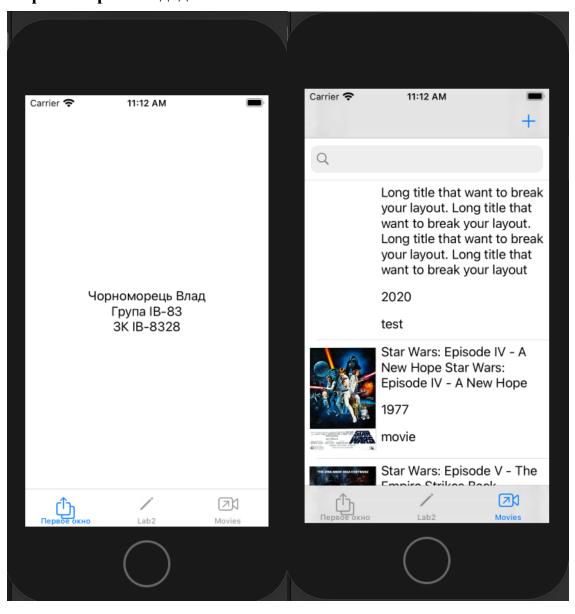
Виконав: студент групи IB-83 ЗК IB-8328 Чорноморець Влад

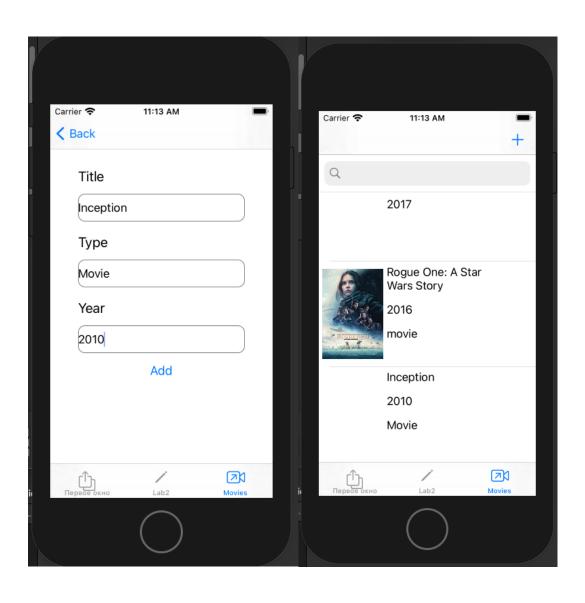
Варіант: 1

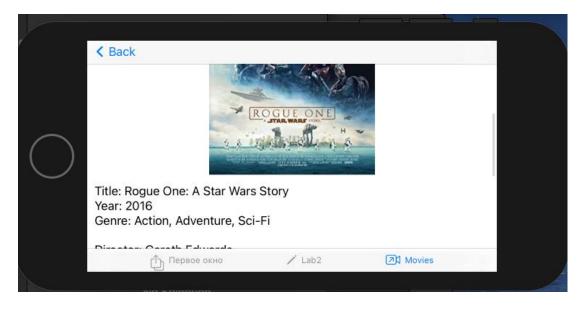
Варіант 1

Предметна область – фільми <u>Архів для завантаження</u>

Скріншот роботи додатка







Лістинг коду

MovieDetailsViewController.swift

```
//
       // MovieDetailsViewController.swift
       // LabWork1.1
       //
       // Created by Vladislav on 09.05.2021.
       //
       import UIKit
       class MovieDetailsViewController: UIViewController {
           var details: Movie?
           @IBOutlet var poster: UIImageView!
           @IBOutlet var movieTitle: UILabel!
           @IBOutlet var genre: UILabel!
           @IBOutlet var year: UILabel!
           @IBOutlet var director: UILabel!
           @IBOutlet var actors: UILabel!
           @IBOutlet var country: UILabel!
           @IBOutlet var language: UILabel!
           @IBOutlet var production: UILabel!
           @IBOutlet var released: UILabel!
           @IBOutlet var runtime: UILabel!
           @IBOutlet var awards: UILabel!
           @IBOutlet var rating: UILabel!
           @IBOutlet var plot: UILabel!
           override func viewDidLoad() {
               super.viewDidLoad()
               setImageAndLabels()
           }
           func setImageAndLabels() {
               poster.image = Manager.shared.getImage(details!.poster as NSString)
               movieTitle.text = "Title: " + details!.title
               year.text = "Year: " + details!.year
               genre.text = "Genre: " + details!.genre!
               director.text = "Director: " + details!.director!
```

```
actors.text = "Actors: " + details!.actors!
country.text = "Country: " + details!.country!
language.text = "Language: " + details!.language!
production.text = "Production: " + details!.production!
released.text = "Released: " + details!.released!
runtime.text = "Runtime: " + details!.runtime!
awards.text = "Awards: " + details!.awards!
rating.text = "Rating: " + details!.rated!
plot.text = "Plot: " + details!.plot!
}
```

AddMovieViewController.swift

```
//
       // AddMovieViewController.swift
       // LabWork1.1
       //
       // Created by Vladislav on 09.05.2021.
       //
       import UIKit
       class AddMovieViewController: UIViewController {
           var movie:Movie?
           private let scrollView: UIScrollView = {
               let scrollView = UIScrollView()
               scrollView.clipsToBounds = true
               return scrollView
           }()
           private let titleLabel: UILabel = {
               let label = UILabel()
               label.text = "Title"
               label.font = label.font.withSize(20)
               return label
           }()
           private let titleField:UITextField = {
               let field = UITextField()
               field.layer.borderWidth = 1
               field.layer.cornerRadius = 10
               field.layer.borderColor = UIColor.gray.cgColor
```

```
return field
}()
private let typeLabel: UILabel = {
    let label = UILabel()
    label.text = "Type"
    label.font = label.font.withSize(20)
    return label
}()
private let typeField: UITextField = {
    let field = UITextField()
    field.layer.borderWidth = 1
    field.layer.cornerRadius = 10
    field.layer.borderColor = UIColor.gray.cgColor
    return field
}()
private let yearLabel: UILabel = {
    let label = UILabel()
    label.text = "Year"
    label.font = label.font.withSize(20)
    return label
}()
private let yearField: UITextField = {
    let field = UITextField()
    field.layer.borderWidth = 1
    field.layer.cornerRadius = 10
    field.layer.borderColor = UIColor.gray.cgColor
    field.keyboardType = .numberPad
    field.tag = 1
    return field
}()
private let button:UIButton = {
    let button = UIButton()
    button.setTitle("Add", for: .normal)
    button.setTitleColor(.systemBlue, for: .normal)
    button.addTarget(self, action: #selector(didTapAddButton), for: .touchUpInside)
    return button
```

```
@objc func didTapAddButton() {
        titleField.resignFirstResponder()
        yearField.resignFirstResponder()
        typeField.resignFirstResponder()
        let title = titleField.text ?? ""
        let year = yearField.text ?? ""
        let type = typeField.text ?? ""
        movie = Movie(title: title, year: year, type: type)
        performSegue(withIdentifier: "unwindToList", sender: nil)
    }
    override func viewDidLoad() {
        super.viewDidLoad()
        titleField.delegate = self
        yearField.delegate = self
        typeField.delegate = self
        view.backgroundColor = .white
        view.addSubview(scrollView)
        scrollView.addSubview(titleLabel)
        scrollView.addSubview(titleField)
        scrollView.addSubview(typeLabel)
        scrollView.addSubview(typeField)
        scrollView.addSubview(yearLabel)
        scrollView.addSubview(yearField)
        scrollView.addSubview(button)
        registerNotifications()
        hideKeyboard()
    }
    override func viewDidLayoutSubviews() {
        super.viewDidLayoutSubviews()
        scrollView.frame = view.bounds
        titleLabel.frame = CGRect(x: 40, y: 20, width: view.bounds.width - 80, height:
40)
        titleField.frame = CGRect(x: 40, y: titleLabel.frame.origin.y +
titleLabel.frame.height + 5, width: scrollView.bounds.width - 80, height: 40)
```

```
typeLabel.frame = CGRect(x: 40, y: titleField.frame.origin.y +
titleField.frame.height + 10, width: scrollView.bounds.width - 80, height: 40)
        typeField.frame = CGRect(x: 40, y: typeLabel.frame.origin.y +
typeLabel.frame.height + 5, width: scrollView.bounds.width - 80, height: 40)
        yearLabel.frame = CGRect(x: 40, y: typeField.frame.origin.y +
typeField.frame.height + 10, width: scrollView.bounds.width - 80, height: 40)
        yearField.frame = CGRect(x: 40, y: yearLabel.frame.origin.y +
yearLabel.frame.height + 5, width: scrollView.bounds.width - 80, height: 40)
        button.frame = CGRect(x: scrollView.bounds.width/2 - 20, y:
yearField.frame.origin.y + yearField.frame.height + 10, width: 40, height: 30)
    }
}
extension AddMovieViewController:UITextFieldDelegate {
    func textFieldDidEndEditing(_ textField: UITextField) {
        if !textField.text!.isEmpty {
            if(textField.tag == 1) {
                if(textField.text?.rangeOfCharacter(from:
CharacterSet.decimalDigits.inverted) != nil) {
                    textField.text = ""
                }
            }
        }
    }
    func textFieldShouldReturn(_ textField: UITextField) -> Bool {
        textField.resignFirstResponder()
        return true
    }
}
extension AddMovieViewController {
    func registerNotifications() {
        NotificationCenter.default.addObserver(self, selector:
#selector(keyboardWillShow), name: UIResponder.keyboardWillShowNotification, object:
nil)
        NotificationCenter.default.addObserver(self, selector:
#selector(keyboardWillHide), name: UIResponder.keyboardWillHideNotification, object:
nil)
    }
    @objc func keyboardWillShow(notification: NSNotification) {
```

```
if let keyboardSize =
(notification.userInfo?[UIResponder.keyboardFrameBeginUserInfoKey] as?
NSValue)?.cgRectValue {
            scrollView.contentInset = UIEdgeInsets(top: 0, left: 0, bottom:
keyboardSize.height + button.frame.maxY -
self.tabBarController!.tabBar.frame.size.height, right: 0)
            scrollView.scrollIndicatorInsets = scrollView.contentInset
        }
   }
   @objc func keyboardWillHide(notification: NSNotification) {
        scrollView.contentInset = .zero
        scrollView.scrollIndicatorInsets = scrollView.contentInset
   }
   func hideKeyboard() {
        let tap = UITapGestureRecognizer(target: self, action:
#selector(dismissKeyboard))
        tap.cancelsTouchesInView = false
        view.addGestureRecognizer(tap)
   }
   @objc func dismissKeyboard() {
        view.endEditing(true)
   }
}
```

Висновок:

В цій лабораторній роботі була доповнена робота 3. Тепер можна переглядати інформацію про фільм, можна додати свій фільм, або видалити фільм зі списку.