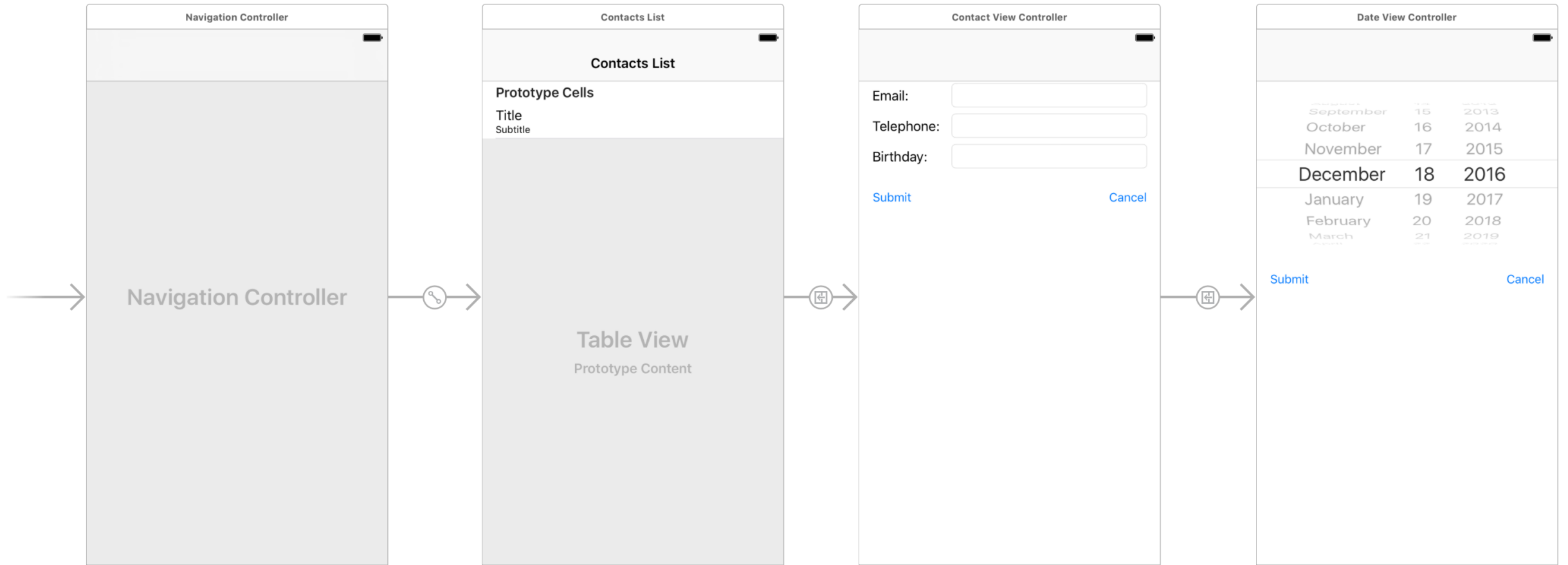


# Aufgabe 15a

Kontaktliste in Swift



```
class ContactStore {  
    static let main:ContactStore = ContactStore()  
    var list:[Contact] = [Contact]()  
    private init() {  
        self.list.append(Contact(firstname: "Hans", lastname: "Müller", telephone: "012345678", email: "hans@müller.de", birthday: Date(birthday: "23.08.2008")))  
        self.list.append(Contact(firstname: "Max", lastname: "Mustermann", telephone: "001122334455", email: "max@mustermann.de", birthday: Date(birthday: "11.01.1991")))  
        self.list.append(Contact(firstname: "Hans", lastname: "Wurst", telephone: "774422008", email: "hans@wurstbrot.org", birthday: Date(birthday: "30.09.2016")))  
        self.list.append(Contact(firstname: "Gustav", lastname: "Ganz", telephone: "1352467982", email: "gustav@ganz.com", birthday: Date(birthday: "28.06.1991")))  
        self.list.append(Contact(firstname: "Donald", lastname: "Duck", telephone: "089223812", email: "donald@duck.ente", birthday: Date(birthday: "21.12.1916")))  
        self.list.append(Contact(firstname: "Ulrich", lastname: "Volke", telephone: "083214582", email: "volke@gmx.com", birthday: Date(birthday: "03.10.1989")))  
        self.list.append(Contact(firstname: "Klaus", lastname: "Kilmar", telephone: "07143852", email: "kkilmar@lmu.de", birthday: Date(birthday: "29.02.1993")))  
        self.list.append(Contact(firstname: "Paul", lastname: "Esslinger", telephone: "028724821", email: "Esslinger@fern.de", birthday: Date(birthday: "01.01.2001")))  
        self.list.append(Contact(firstname: "Reimar", lastname: "Fridl", telephone: "1848582312", email: "Fridl@frodo.org", birthday: Date(birthday: "24.03.2009")))  
        self.list.append(Contact(firstname: "Harry", lastname: "Schwirblatt", telephone: "00138124812", email: "Schwirblatt@klatsch.net", birthday: Date(birthday: "27.08.2004")))  
    }  
}
```

```
class Contact {
    let firstname:String
    let lastname:String
    var telephone:String
    var email:String
    var birthday:Date

    var name:String {
        return firstname + " " + lastname
    }

    init(firstname:String, lastname:String, telephone:String, email:String, birthday:Date) {
        self.firstname = firstname
        self.lastname = lastname
        self.telephone = telephone
        self.email = email
        self.birthday = birthday
    }
}
```

```
extension Date {

    // Gets a string with birthday (e.g. 21.12.2016)
    init(birthday:String) {
        let df = DateFormatter()
        df.dateFormat = "dd.MM.yyyy"
        self = df.date(from: birthday) ?? Date()
    }

    // Returns the date as a formatted string (e.g. 21. Dec. 2016)
    var birthday:String {
        let df = DateFormatter()
        df.dateFormat = "dd. MMM yyyy"
        return df.string(from: self)
    }
}
```

# UITableView

```
class ContactsTableViewController: UITableViewController {  
    let contactStore = ContactStore.main  
  
    override func viewWillAppear(_ animated: Bool) {  
        self.tableView.reloadData()  
    }  
  
    // MARK: - Table view data source  
  
    override func tableView(_ tableView: UITableView, numberOfRowsInSection section: Int) -> Int {  
        return self.contactStore.list.count  
    }  
  
    override func tableView(_ tableView: UITableView, cellForRowAt indexPath: IndexPath) -> UITableViewCell {  
        let cell = tableView.dequeueReusableCell(withIdentifier: "Cell", for: indexPath)  
  
        let contact = self.contactStore.list[indexPath.row]  
  
        cell.textLabel?.text = contact.name  
        cell.detailTextLabel?.text = "Phone: \(contact.telephone)"  
  
        return cell  
    }  
  
    // MARK: - Table view delegate  
  
    override func tableView(_ tableView: UITableView, didSelectRowAt indexPath: IndexPath) {  
        self.performSegue(withIdentifier: "ShowContact", sender: indexPath)  
    }  
  
    // MARK: - Navigation  
  
    override func prepare(for segue: UIStoryboardSegue, sender: Any?) {  
        if segue.identifier == "ShowContact", let vc = segue.destination as? ContactViewController, let indexPath = sender as? IndexPath {  
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    }  
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        cell.textLabel?.text = contact.name
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            vc.contact = self.contactStore.list[indexPath.row]
        }
    }
}
```

# ContactView

```
class ContactViewController: UIViewController {  
  
    var contact:Contact!  
    var selectedDate:Date!  
  
    @IBOutlet weak var emailTextField: UITextField!  
    @IBOutlet weak var telephoneTextField: UITextField!  
    @IBOutlet weak var birthdayTextField: UITextField!  
  
    override func viewDidLoad() {  
        super.viewDidLoad()  
  
        self.emailTextField.text = self.contact.email  
        self.telephoneTextField.text = self.contact.telephone  
        self.selectedDate = self.contact.birthday  
    }  
  
    override func viewWillAppear(_ animated: Bool) {  
        self.birthdayTextField.text = self.selectedDate.birthday  
    }  
  
    @IBAction func changeBirthday(_ sender: Any) {  
        self.performSegue(withIdentifier: "ChangeBirthday", sender: sender)  
    }  
  
    @IBAction func submitAction(_ sender: Any) {  
        self.contact.email = self.emailTextField.text!  
        self.contact.telephone = self.telephoneTextField.text!  
        self.contact.birthday = self.selectedDate  
  
        let _ = self.navigationController?.popViewController(animated: true)  
    }  
  
    @IBAction func cancelAction(_ sender: Any) {  
        let _ = self.navigationController?.popViewController(animated: true)  
    }  
  
    // MARK: - Navigation  
  
    override func prepare(for segue: UIStoryboardSegue, sender: Any?) {  
        if segue.identifier == "ChangeBirthday", let vc = segue.destination as? DateViewController {  
            vc.contactViewController = self  
        }  
    }  
}
```

# ContactView

```
class ContactViewController: UIViewController {

    var contact:Contact!
    var selectedDate:Date!

    @IBOutlet weak var emailTextField: UITextField!
    @IBOutlet weak var telephoneTextField: UITextField!
    @IBOutlet weak var birthdayTextField: UITextField!

    override func viewDidLoad() {
        super.viewDidLoad()

        self.emailTextField.text = self.contact.email
        self.telephoneTextField.text = self.contact.telephone
        self.selectedDate = self.contact.birthday
    }

    override func viewWillAppear(_ animated: Bool) {
        self.birthdayTextField.text = self.selectedDate.birthday
    }

    @IBAction func changeBirthday(_ sender: Any) {
        self.performSegue(withIdentifier: "ChangeBirthday", sender: sender)
    }

    @IBAction func submitAction(_ sender: Any) {
        self.contact.email = self.emailTextField.text!
        self.contact.telephone = self.telephoneTextField.text!
        self.contact.birthday = self.selectedDate

        let _ = self.navigationController?.popViewController(animated: true)
    }

    @IBAction func cancelAction(_ sender: Any) {
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    // MARK: - Navigation

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        self.emailTextField.text = self.contact.email
        self.telephoneTextField.text = self.contact.telephone
        self.selectedDate = self.contact.birthday
    }

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        self.birthdayTextField.text = self.selectedDate.birthday
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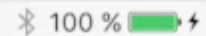
```
class DateViewController: UIViewController {  
  
    var contactViewController: ContactViewController!  
  
    @IBOutlet weak var datePicker: UIDatePicker!  
  
    override func viewDidLoad() {  
        super.viewDidLoad()  
  
        self.datePicker.date = self.contactViewController.selectedDate  
    }  
  
    @IBAction func submitAction(_ sender: Any) {  
        self.contactViewController.selectedDate = self.datePicker.date  
        let _ = self.navigationController?.popViewController(animated: true)  
    }  
  
    @IBAction func cancelAction(_ sender: Any) {  
        let _ = self.navigationController?.popViewController(animated: true)  
    }  
  
}
```

# DateView

```
class DateViewController: UIViewController {  
    var contactViewController:ContactViewController!  
  
    @IBOutlet weak var datePicker: UIDatePicker!  
  
    override func viewDidLoad() {  
        super.viewDidLoad()  
  
        self.datePicker.date = self.contactViewController.selectedDate  
    }  
  
    @IBAction func submitAction(_ sender: Any) {  
        self.contactViewController.selectedDate = self.datePicker.date  
        let _ = self.navigationController?.popViewController(animated: true)  
    }  
  
    @IBAction func cancelAction(_ sender: Any) {  
        let _ = self.navigationController?.popViewController(animated: true)  
    }  
}
```



09:41



## Contacts List

Hans Müller

Phone: 012345678

Max Mustermann

Phone: 001122334455

Hans Wurst

Phone: 774422008

Gustav Ganz

Phone: 1352467982

Donald Duck

Phone: 089223812

Ulrich Volke

Phone: 083214582

Klaus Kilmar

Phone: 07143852

Paul Esslinger

Phone: 028724821

Reimar Fridl

Phone: 1848582312

Harry Schwirblatt

Phone: 00138124812