AAD Hybrid Development

Assignment 1: research and prototyping

General info

Grouping: 2 students working in a pair.
Entry requirement: Basic knowledge of web frameworks and techniques
Time indication: +- 13 hours per student * 3 weeks (39 hours per student)
Timeframe: Week 1, 2, 3
Learning objectives:

(SW/REA/3)	The student can compare hybrid frameworks using a structured approach
(SW/REA/3)	The student can implement a POC in a given language, with the goal to research possibilities of a framework
(SW/DES/3)	The student can substantiate a choice for a hybrid framework and language based on characteristics / differences between the frameworks.

Goal

This first assignment is all about researching frameworks and do some rapid prototyping with these frameworks to find out which one fits your needs. We do that in a structured way which we called the AAD Research Approach.

Planning and organization

The AAD Research approach describes 3 steps. Please consult the documentation about that method first! We suggest you plan the steps as following:

Phase 1 (week 1)
Compare three frameworks. For example:
- Ionic
- React Native
- NativeScript
- Flutter with Dart
- ... any other (viable) hybrid framework

Phase 2 (Week 2 and the beginning of week 3)
Implements the casus as described on the next page (the party planner). Reflect on the implementation process in your documentation. What went well, what took you way more time than needed? What did you like about the framework, and what held you back? Please note: This step is done for the two highest scoring frameworks, so you'll build two prototypes.

Phase 3 (The end of week 3)
Choose the framework you proceed with. Draw a final conclusion based on phase 1 and phase 2 and write this in your documentation.

Submission and deadline details

Hand in the following on Blackboard
- A PDF document containing step 1 (your criteria, the rating table with the frameworks and scores, and the reasoning behind each score), step 2 (reflection on both prototypes), and step 3 (conclusion including reasoning).
- A ZIP file with prototype 1
- A ZIP file with prototype 2
- **If you do a second attempt, list the changes as well in an easy to understand change log.**

The deadline is listed on Blackboard under Assignments. We offer you a chance to hand-in in week 3 to get your grade sooner. The retake is in the next quartile.

Case: Party planner

Once in a while it's just time for a party! But how to get your friends together at the same time and the same place? The party planner app will help you out!

Requirements

Must

- The app works on Android and iOS.
- The application should save the list of parties and people who are invited.
- The app has some sort of professional (native?) styling.
- The app shows a list of upcoming parties and gives the user the ability to add one.
- When the user clicks adds a party he/she can put then name, the description and the date of the party. Add the party to the phone agenda immediately after creating the party.
- Allow the user to add persons to the party. When the user presses the button the phones contact list should appear and the user can select a contact.
- Allow the user to send an invitation to the party people. You can do this with plugins the framework has available. Otherwise an enhanced mailto:// URL should work. You also can use some sort of iCal invitation, but's that's not necessary.

Should

- Add edit functionality to edit the name, description and date and time of the party (make sure to update the agenda!). Also enable the removal of users from the party.

Could

- Add a location to the party and share this with the other party people.
- Sends update notifications by mail when you updated the party.
- Add full-blown calendar integration, with real (iCal) invitations and free/busy scheduling.