## Training plan

## Javascript

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| Theme | Description | Task | Control | Deadline |
| Objects in JS | Need to learn how objects works in JS. Reference types in JS.  After learning. Vlad understand object behavior in language. Know how to copy an object and understand difference of the refence types with other types. Can create and copy objects to create a real copy. | Reading https://javascript.info/ topics 4.1, 4.2, 4.3. And done tasks after each topic | Meeting with results. | 06.09.2022 |
| Classes in JS | Learn classes in JS. Understanding of the basic principles of OOP (optional). Understanding basic entities of the classes (class, access methods, static, constuctors, extending). Can create classes, with all object entities and work with classes. | Reading <https://javascript.info/>  Topics from chapter 9.  Make singleton. Functional + classes | Meeting with results. | 09.09.2022 |
| This in JS | Learn this and context in JS. Understanding of context of execution, understanding how this works in the execution context. Could find out why “this” is undefined. Learn how to work with bind, call, apply functions in JS and what they done. | Reading https://javascript.info/ Topics from part 4.4, 6.9, 6.10, 6.11 and done tasks from each topic. | Meeting with results. | 13.09.2022 |

## Typescript

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| Theme | Description | Task | Control | Deadline |
| Typescript | Learn how to use TypeScript. Learn about interfaces, types, enums, generic types, how typing work with properties (utility types). Write code using TypeScript. Use typescript to define interfaces. Use typescript to describe functions, methods, another interfaces and create complicated interface structures. | Complete all of the tasks from <https://github.com/total-typescript/beginners-typescript-tutorial> | Created github repository with tasks and send them on ready.  Discussion of the tasks on deadline meeting. | 20.09.2022 |

Last week - refresh memory (deadline – September 23):

1. React lifecycle
2. React hooks
3. HTTP – protocol (headers)
4. REST – methods, naming

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| Theme | Description | Task | Control | Deadline |
| DB entities (relations, keys, relationships, indexes) | Need to learn basic DB entities, relations, keys, relationships, indexes. Understand and know how to detect the relation between databases. Know and done decomposition of the table with relation. Know keys types and they usage. Can create DB with multiple tables with different relation types | Read topic number 2 from Epam training. Complete all the tasks from subtopic. Finish final task from topic. | Meeting with results. | 04.10.2022 |
| Normalization | Need to learn, normazlition process in DB. Understand and use at least 3 normal forms. Know how to normalize table and could do a table normalization. Know how to do Denormalization and why. | Read topic number 3 from Epam training. Complete all the tasks from subtopic. Finish final task from topic. | Meeting with results. | 11.10.2022 |
| Addition DB object and processes | Learn about addition DB objects and processes. Know how to create an views/checks/triggers etc. Know meaning and situations when to use them. | Read topic number 5 from Epam training. Complete all the tasks from subtopic. Finish final task from topic. | Meeting with results. | 18.10.2022 |

Addition chapters 4 and 6 should be learned at some point of time. Read 6 later, read 4 if really interested.