An essential part of the work is devoted to the study of the sets of Fréchet subdifferentiability from the view of the descriptive set theory. Proofs of the known results of L. Zajíek, P. Holický, M. Laczkovich and M. Šmídek are given. A new result is that there exists a Lipschitz function with non-Borel set of Fréchet subdifferentiability on every non-reflexive Banach space. The Borel classes of the sets of Fréchet subdifferentiability of continuous functions on reflexive spaces are studied as well. Further, some sets of sequences in Banach spaces are investigated. A modified proof of the theorem of R. Kaufman which says that every non-reflexive Banach space can be renormed not to have Borel set of norm-attaining functionals is shown. A characterization of non-quasireflexive Banach spaces is given.